UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF KANSAS

UNITED STATES OF AMERICA, Plaintiff, and KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT, ex rel STATE OF KANSAS, Plaintiff Intervener, v. COFFEYVILLE RESOURCES REFINING & MARKETING, LLC and COFFEYVILLE RESOURCES TERMINAL, LLC Defendants.	)	Civil No.

WHEREAS after Closing, Coffeyville Resources Refining & Marketing, LLC ("CRRM") will have acquired the Farmland Industries, Inc. ("Farmland Industries") refinery and certain related assets in Coffeyville, Kansas (hereinafter collectively "refinery"), and Coffeyville Resources Terminal, LLC ("CRT") will have acquired the Farmland Industries Phillipsburg terminal and certain related assets in Phillipsburg, Kansas (hereinafter "terminal"), each pursuant to a sale order entered by the United States Bankruptcy Court for the Western District of Missouri on or about November 4, 2003;

WHEREAS prior to the Closing, Farmland Industries had disclosed to the United States Environmental Protection Agency ("EPA") and the Kansas Department of Health and the Environment ("KDHE") under EPA's Audit Policy and the Kansas environmental audit laws, that it had triggered certain applicable requirements of the Clean Air Act ("CAA") at the refinery;

WHEREAS to remedy the potential CAA non-compliance at the refinery self-disclosed by Farmland Industries, EPA alleges that Farmland Industries was required to install certain controls, make certain operational changes and incorporate those control and operational changes into federally enforceable permit conditions for the refinery;

WHEREAS Farmland Industries had not completed the installation of the controls, made all of the required operational changes and incorporated those control and operational changes into federally enforceable permit terms and conditions for the refinery prior to the Closing;

WHEREAS Plaintiff, the United States of America (hereinafter "Plaintiff" or "the United States"), on behalf of EPA, and KDHE recognize and acknowledge that neither CRRM nor CRT caused or contributed to the potential CAA non-compliance self-disclosed by Farmland

Industries at the refinery;

WHEREAS notwithstanding the fact that they did not cause or contribute to the potential past CAA non-compliance at the refinery, CRRM has agreed to install the controls, make the operational changes and incorporate the control and operational changes into federally enforceable permit conditions upon acquiring the refinery from Farmland Industries;

WHEREAS based on the historic generation, treatment, storage and/or disposal of hazardous and/or solid wastes at the refinery and terminal, CRRM as the current owner and/or operator of the refinery, and CRT, as the current owner and/or operator of the terminal, are subject to the jurisdiction of the Solid Waste Disposal Act (SWDA), as amended by the Resource Conservation and Recovery Act (RCRA) with the Hazardous and Solid Waste Amendments, 42 U.S.C. § 6901 *et seq.*, and the regulations promulgated thereunder;

WHEREAS CRRM and CRT have waived any applicable federal or state requirements of statutory notice of the alleged violations by Farmland Industries that have not been remedied as of the date of the sale of the refinery and/or terminal to CRRM and CRT, respectively; and

WHEREAS for the reasons described above, the United States of America (hereinafter "Plaintiff" or "the United States"), on behalf of the United States Environmental Protection Agency (hereinafter "EPA"), The State of Kansas (hereinafter "KDHE" or "Plaintiff Intervener"), CRRM and CRT have agreed that this Consent Decree and the simultaneous filing of a complaint are the best means of memorializing the parties' agreement, that the agreement as memorialized in this Consent Decree is in the best interest of the parties and in the public interest, and that entry of this Consent Decree without further litigation is the most appropriate means of resolving this matter;

WHEREAS the United States, has simultaneously filed a Complaint and lodged this

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Consent Decree 1) against CRRM for alleged CAA violations at the refinery located in Coffeyville, Kansas, which has been owned and operated by Farmland Industries, Inc., and for performance of certain actions under RCRA at said refinery, and 2) against CRT for performance of certain actions under RCRA at the terminal and former petroleum refinery located in Phillipsburg, Kansas, which has been owned and operated by Farmland Industries, Inc;

WHEREAS the KDHE has filed a Complaint in Intervention for the same purpose;

WHEREAS in light of the agreement memorialized in this Consent Decree, CRRM and CRT have not answered or otherwise responded to the Complaint;

NOW, THEREFORE, without any admission of fact or law, and without any admission of the violations alleged in the Complaint, it is hereby ORDERED AND DECREED as follows:

I. JURISDICTION AND VENUE

1. This Court has jurisdiction over the subject matter of this action and over the Parties pursuant to 28 U.S.C. §§ 1331, 1345 and 1355. In addition, this Court has jurisdiction over the subject matter of this action pursuant to Sections 113(b) and 167 of the CAA, 42 U.S.C. §§ 7413(b) and 7477, and pursuant to Section 3008(a)(1) of RCRA, 42 U.S.C. 6928(a)(1). The United States' complaint states a claim upon which relief may be granted against CRRM. Authority to bring this suit is vested in the United States Department of Justice by 28 U.S.C. §§ 516 and 519, and Section 305 of the CAA, 42 U.S.C. § 7605. Plaintiff-Intervener, KDHE, ex rel. the State of Kansas, filed a complaint in intervention in this matter for alleged violations of its corresponding state air quality statutes and regulations.

2. Venue is proper in the District of Kansas pursuant to Section 113(b) of the CAA, 42 U.S.C. § 7413(b), Section 3008(a)(1), 42 U.S.C. § 6928(a)(1) and 28 U.S.C. §§ 1391(b) and

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(c), and 1395(a). CRRM and CRT consent to the personal jurisdiction of this Court and waive any objections to venue in this District.

3. Notice of the commencement of this action has been given to the State of Kansas in accordance with Section 113(a)(1) of the CAA, 42 U.S.C. § 7413(a)(1), and as required by Section 113(b) of the CAA, 42 U.S.C. § 7413(b) and Section 3008(a)(2), of RCRA, 42 U.S.C. § 6928(a)(2).

II. APPLICABILITY AND BINDING EFFECT

4. The CAA and RCRA provisions of this Consent Decree related to the refinery located in Coffeyville, Kansas, shall apply to CRRM and shall be binding upon the United States, the State of Kansas, CRRM and its agents, successors and assigns. The RCRA provisions of this Consent Decree related to the terminal and former refinery located in Phillipsburg, Kansas shall apply to CRT and shall be binding upon the United States, the State of Kansas, CRT and its agents, successors, and assigns.

5. CRRM and CRT agree not to contest the validity of this Consent Decree in any subsequent proceeding to implement or enforce its terms.

6. Effective from the Date of Lodging of the Consent Decree, CRRM shall give written notice of this Consent Decree to any successors in interest prior to the transfer of ownership or operation of all or any portion of the refinery and shall provide a copy of this Consent Decree to any successor in interest. Effective from the Date of Lodging of this Consent Decree, CRT shall give written notice of this Consent Decree to any successors in interest prior to the transfer of ownership or operation of all or any portion of the terminal and shall provide a copy of this Consent Decree to any successor in interest. CRRM and CRT, as applicable, shall notify the United States and the State of Kansas in accordance with the notice provisions set

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forth in Paragraph 145 (Notice), of any successor in interest at least thirty (30) days prior to such transfer.

7. CRRM and CRT, as applicable, shall condition any transfer, in whole or in part, of ownership of, operation of, or other interest (exclusive of any non-controlling, non-operational member-owner interest) in its respective properties upon the execution by the transferee of a modification to this Consent Decree, which makes the terms and conditions of this Consent Decree applicable to the transferee. The Parties shall file that modification with the Court promptly upon such transfer.

III. DEFINITIONS

8. Unless otherwise defined herein, terms used in this Consent Decree shall have the meaning given to those terms in the CAA and RCRA and the implementing regulations promulgated thereunder. The following terms used in this Consent Decree shall be defined for purposes of this Consent Decree and the reports or documents submitted pursuant thereto as follows:

A. "Applicable Federal and State Agencies" shall mean EPA's Office of Regulatory Enforcement, EPA's Region 7, and KDHE.

B. "Calendar Quarter" shall mean the three month period ending on March 31st, June 30th, September 30th, or December 31st.

C. "CEMS" shall mean continuous emissions monitoring system.

D. "CRRM" shall mean Coffeyville Resources Refining & Marketing, LLC.

E. "CRT" shall mean Coffeyville Resources Terminal, LLC.

F. "Consent Decree" or "Decree" shall mean this Consent Decree, including any and all appendices attached to this Consent Decree.

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G. "CO" shall mean carbon monoxide.

H. "Date of Closing" shall mean the date CRRM acquires the refinery and related assets located in Coffeyville, Kansas, and CRT acquires the former refinery, terminal and related assets located in Phillipsburg, Kansas.

I. "Date of Lodging of the Consent Decree" shall mean the date this Consent Decree is filed for lodging with the Clerk of the Court for the United States District Court for the District of Kansas.

J. "Date of Entry of the Consent Decree" shall mean the date this Consent Decree is approved or signed by the United States District Court Judge.

K. "Day" or "Days" shall mean a calendar day or days.

L. "Fluid Catalytic Cracking Unit (FCCU)" shall mean the regenerator in which coke burn-off and catalyst or contact material regeneration occurs, and includes the regenerator combustion airblower.

M. "KDHE" shall mean the Kansas Department of Health and Environment and any successor departments or agencies of the State of Kansas.

N. "Malfunction" shall mean any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

O. "NOx" shall mean nitrogen oxides.

P. "Paragraph" shall mean a portion of this Consent Decree identified by an Arabic numeral.

Q. "Parties" shall mean the United States, the State of Kansas, CRRM and

CRT.

R. "refinery" shall mean the refinery and related assets located in Coffeyville, Kansas, formerly owned and/or operated by Farmland Industries, Inc. and now owned and operated by CRRM.

S. "PM" shall mean particulate matter.

T. "Post-Lodging Compliance Dates" shall mean any dates after the Date of Lodging of the Consent Decree. Post-Lodging Compliance Dates include dates certain (e.g., "December 31, 2003), dates after Lodging represented in terms of "months after Lodging" (e.g., "twelve months after the Date of Lodging"), and dates after Lodging represented by actions taken (e.g., "Date of Certification"). The Post-Lodging Compliance Dates represent the dates by which work is required to be completed or an emission limit is required to be met under the applicable provisions of this Consent Decree.

U. "SO2" shall mean sulfur dioxide.

V. "Sulfur Recovery Plant" or "SRP" shall mean a process unit that recovers sulfur from hydrogen sulfide by a vapor phase catalytic reaction of sulfur dioxide and hydrogen sulfide.

W. "terminal" shall mean the former refinery, terminal, and related assets formerly owned and/or operated by Farmland Industries, Inc. as the Phillipsburg Terminal and now owned and operated by Coffeyville Resources Terminal, LLC.

X. "Total Catalyst" shall mean all forms of catalyst added to the FCCU, including but not limited to base catalyst and equilibrium catalyst, but excluding Pollutant Reducing Catalyst Additive.

Y. "Weight % Pollutant Reducing Catalyst Additive Rate" shall mean 100

percent times the following quantity: the amount of pollutant reducing catalyst additive in pounds per day divided by the amount of Total Catalyst added in pounds per day.

IV. NOx EMISSIONS REDUCTIONS FROM FCCU

A. Option to Elect Compliance with Alternative NOx Limits

9. In lieu of the NOx Reducing Catalyst Additive Program set forth in Paragraphs 11 through 22 below, at any time between the Date of Lodging of this Consent Decree and December 31, 2010, CRRM may elect to comply with the following alternative NOx emission limits on the FCCU exhaust stream:

- 20 ppmvd @ 0% O2 on a 365 day rolling average basis, and
- 40 ppmvd @ 0% O2 on a seven (7) day rolling average basis.

NOx emissions during periods of Start-up, Shutdown, or Malfunction shall not be used in determining compliance with the emission limit of 40 ppmvd @ 0% O2 on a seven (7) day rolling average basis, provided that during such periods, CRRM implements good air pollution control practices to minimize NOx emissions.

10. This election shall be effective by written notification by CRRM to EPA and KDHE. Compliance with the 20/40 ppmvd alternative NOx limits shall commence immediately upon notification to EPA and KDHE of the decision to comply with the alternative limits.

B. Interim NOx Catalyst Additive Program

11. Unless and until CRRM elects to comply with the alternative NOx limits allowed by Subsection IV.A, above, CRRM shall use NOx Reducing Catalyst Additives as set forth below.

i. NOx Baseline Data and NOx Model

12. By no later than March 31, 2007, CRRM shall submit to EPA and KDHE a report

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of 12 months of baseline data and a report describing a model to predict uncontrolled NOx concentration and mass emission rate from the FCCU. The baseline time period shall begin on January 1, 2006 and end on December 31, 2006. The baseline data shall include all data considered in development of the model on a daily average basis and at a minimum, the following data on a daily average basis:

(a) Regenerator flue gas temperature;

(b) Coke burn rate in pounds per hour;

(c) FCCU feed rate in barrels per day;

(d) FCCU feed API gravity;

(e) FCCU feed sulfur and basic nitrogen content as a weight %, except that if after 30 days of daily monitoring of the FCCU feed nitrogen content, the variability of feed nitrogen is less than one standard deviation from the mean, CRRM may commence monitoring and recording the feed nitrogen content through daily sampling composited on a weekly basis for the remainder of the baseline period; in addition, after this 30 day period, CRRM may propose, for EPA approval, alternate nitrogen data collection requirements;

(f) Estimated percentage, and where available, actual percentage of each type of FCCU feed component (i.e. atmospheric gas oil, vacuum gas oil, atmospheric tower bottoms, vacuum tower bottoms, etc.);

(g) Estimated percentage, and where available, actual percentage by volume of the FCCU feed that is hydrotreated;

(h) CO boiler firing rate, fuel type and fuel sulfur content, if applicable;

(i) CO boiler combustion temperature, if applicable;

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(j) Total catalyst addition rate;

(k) NOx and SO2 Reducing Catalyst Additive addition rates, conventional combustion promoter addition rates, and/or Low NOx Combustion Promoter addition rates; and

(l) Hourly and daily SO2, NOx, CO and O2 concentrations.

Upon request by EPA, Coffeyville Resources shall submit any additional available data that EPA determines it needs to evaluate the model. The report describing the model shall include a description of how the model was developed including which parameters were considered, why parameters were eliminated, efforts and results of model validation, and statistical methods used to arrive at the equation to predict uncontrolled NOx concentration and mass emission rate.

ii. NOx Reducing Catalyst Additives - Optimization Study

13. By no later than March 31, 2007, CRRM shall submit, for EPA approval, a proposed protocol consistent with the requirements of Appendix 1 for optimization studies to establish the optimized NOx Reducing Additive rate for the FCCU. The protocol shall include identification of at least two NOx reducing catalyst additives commercially available that are likely to perform the best in the FCCU, methods to calculate effectiveness, cost effectiveness, methods for baseloading, and percent additive to be used at each increment tested. EPA will either approve one of the proposed catalysts or approve another catalyst that is commercially available. Only NOx reducing catalyst additives approved by EPA shall be used to fulfill the requirements of the Consent Decree. In the event CRRM disputes EPA's catalyst selection, the issue is subject to dispute resolution.

14. Within 30 days of EPA approval of the optimization protocol, CRRM shall commence a six month optimization study of the NOx Reducing Additive in accordance with the

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approved protocol and Appendix 1.

15. Within 30 days of completion of the optimization study, CRRM shall submit a report to EPA and KDHE that contains the results of the optimization study and propose an optimized addition rate of the NOx Reducing Catalyst Additive to be used for the demonstration period for EPA approval. Upon request by EPA, CRRM shall submit any additional available data that EPA determines it needs to evaluate the optimization study.

iii. NOx Reducing Catalyst Additives - Demonstration

16. Within 30 days of EPA approval of the optimization study report, CRRM shall commence an 18 month demonstration of the EPA approved NOx Reducing Additive at the EPA approved optimization addition rates.

17. During the demonstration period, CRRM shall add NOx Reducing Catalyst Additive and operate the FCCU, in a manner that minimizes NOx emissions to the extent practicable and without interfering with conversion or processing rates.

18. Within 90 days of completion of the demonstration, CRRM shall submit a report to EPA and KDHE that contains the results of the demonstration ("NOx Additive Demonstration Report"). The NOx Additive Demonstration Report shall include, at a minimum, the NOx and O2 CEMS data recorded during the Demonstration Period and all applicable baseline data on a daily average basis (or as otherwise specified in Paragraph 12) for the Demonstration Period.

iv. Establishing NOx Interim Emission Limits

19. In the NOx Additive Demonstration Report, CRRM shall propose a short term (i.e. 24-hour or 7-day rolling average) and a long-term (365-day rolling average) concentration-based (ppmvd) NOx emission limit as measured at 0% O2. CRRM shall comply with the emission limits it proposes for the FCCU immediately upon submission of the NOx Additive

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Demonstration Report and shall add NOx Reducing Catalyst Additive at no less than the optimized rate. CRRM shall continue to comply with these limits and add NOx Reducing Catalyst Additive at no less than the optimized rate until CRRM is required to comply with the emissions limits set by EPA pursuant to Paragraph 20, below. Upon request by EPA, CRRM shall submit any additional, available data that EPA determines it needs to evaluate the demonstration.

20. EPA will use the data collected about the FCCU during the baseline period, the Optimization Period, and the Demonstration Period, as well as all other available and relevant information, to establish limits for NOx emissions from the FCCU. EPA will establish a short term (e.g. 24-hour or 7-day rolling average) and a 365-day rolling average concentration-based (ppmvd) NOx emission limits corrected to 0% oxygen. EPA will determine the limits based on: (i) the level of performance during the baseline, Optimization and Demonstration periods; (ii) a reasonable certainty of compliance; and (iii) any other available and relevant information. EPA will notify CRRM of its determination of the concentration-based NOx emissions limits and averaging times for the FCCU. CRRM shall immediately (or within ninety (90) days, if EPA's limit is more stringent than the limit proposed by CRRM) operate the FCCU so as to comply with the EPA-established emission limits.

21. NOx emissions during periods of Startup, Shutdown, or Malfunction shall not be used in determining compliance with the short-term NOx emission limit established pursuant to Paragraphs 19 and 20, provided that during such periods, CRRM implements good air pollution control practices to minimize NOx emissions.

22. In lieu of utilizing NOx reducing catalyst additives at the optimized NOx reducing catalyst additive addition rate, at any time after the final limits have been established pursuant to

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Paragraph 20, CRRM may elect to comply with the NOx emission limit at the FCCU using other means. This election shall be effective upon written notification by CRRM to EPA and KDHE.

C. Compliance with Final NOx Emission Limits

23. By no later than December 31, 2010, CRRM shall install Selective Catalytic Reduction (SCR), LoTOx or another alternative technology approved in writing by EPA and KDHE on the FCCU to comply with the following NOx emissions limits on the FCCU exhaust stream:

° 20 ppmvd @ 0% O2 on a 365 day rolling average basis, and

° 40 ppmvd @ 0% O2 on a seven (7) day rolling average basis.

NOx emissions during periods of Start-up, Shutdown, or Malfunction shall not be used in determining compliance with the emission limit of 40 ppmvd @ 0% O2 on a seven (7) day rolling average basis, provided that during such periods CRRM implements good air pollution control practices to minimize NOx emissions.

24. By no later than June 1, 2008, CRRM shall submit a project schedule to EPA and KDHE for the installation of the NOx air pollution control technology selected to be installed on the FCCU to comply with the NOx emission limits in Paragraph 23. The project schedule will be enforceable under this Consent Decree and shall include dates for the following milestone events:

(a) Date for final selection of NOx control technology to be installed on FCCU,

(b) Start date for the procurement of the NOx air pollution controls,

(c) Start of construction date,

(d) Initial start-up date,

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(e) Date of compliance with NOx emission limits.

V. SO2 EMISSIONS REDUCTIONS FROM FCCU

A. Option to Elect Compliance with Alternative SO2 Limits

25. In lieu of the SO2 Reducing Catalyst Additive Program set forth in Paragraphs 27 through 41 below, at any time between the Date of Lodging of this Consent Decree and December 31, 2010, CRRM may elect to comply with the following alternative SO2 limits on the FCCU exhaust stream:

° 25 ppmvd @ 0% O2 on a 365 day rolling average basis, and

° 50 ppmvd @ 0% O2 on a seven (7) day rolling average basis.

SO2 emissions during periods of Start-up, Shutdown, or Malfunction shall not be used in determining compliance with the emission limit of 50 ppmvd @ 0% O2 on a seven (7) day rolling average basis, provided that during such periods CRRM implements good air pollution control practices to minimize SO2 emissions.

26. This election shall be effective by written notification by CRRM to EPA and KDHE. Compliance with the 25/50 ppmvd alternative SO2 limits shall commence immediately upon notification to EPA and KDHE of the decision to comply with the alternative limits.

i. Pre Interim SO2 Reducing Catalyst Additive Program

27. Within 30 days of closing, CRRM shall add SO2 Reducing Catalyst Additive to the FCCU at a rate of 4% by weight of the Total Catalyst make up rate.

28. By no later than July 1, 2004, CRRM shall add SO2 Reducing Catalyst Additive to the FCCU at a rate of 5% by weight of the Total Catalyst make up rate.

29. By no later than September 1, 2004, CRRM shall submit, for EPA approval, at least two SO2 Reducing Catalyst Additives commercially available that are likely to perform the

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best in the FCCU. EPA will either approve one of the proposed catalysts or approve another catalyst that is commercially available. Only SO2 reducing catalyst additives approved by EPA shall be used to fulfill the requirements of this Consent Decree, with the exception of Paragraphs 27 and 28 above. In the event CRRM disputes EPA's catalyst selection, the issue is subject to dispute resolution.

30. By no later than January 1, 2005, CRRM shall add EPA approved SO2 Reducing Catalyst Additive to the FCCU at a rate of 5% by weight of the Total Catalyst make up rate.

ii. Interim SO2 Catalyst Additive Program

31. Unless and until CRRM elects to comply with the alternative SO2 limits allowed by Subsection V.A, above, CRRM shall use SO2 Reducing Catalyst Additives set forth below.

a. SO2 Baseline Data and SO2 Model

32. By no later than February 28, 2005, CRRM shall submit to EPA and KDHE a report of baseline data and a report describing a model to predict uncontrolled SO2 concentration and mass emission rate from the FCCU. The baseline time period shall begin no later than 30 days after closing and end on December 31, 2004. The baseline data shall include all data considered in development of the model on a daily average basis and at a minimum, the following data on a daily average basis:

(a) Regenerator flue gas temperature;

(b) Coke burn rate in pounds per hour;

(c) FCCU feed rate in barrels per day;

(d) FCCU feed API gravity;

(e) FCCU feed sulfur content as a weight %;

(f) Estimated percentage, and where available, actual percentage of each type of

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FCCU feed component (i.e. atmospheric gas oil, vacuum gas oil, atmospheric tower bottoms, vacuum tower bottoms, etc.);

(g) Estimated percentage, and where available, actual percentage by volume of the FCCU feed that is hydrotreated;

(h) CO boiler firing rate, fuel type and fuel sulfur content, if applicable;

(i) CO boiler combustion temperature, if applicable;

(j) Total catalyst addition rate;

(k) NOx and SO2 Reducing Catalyst Additive addition rates, conventional combustion promoter addition rates, and/or Low NOx Combustion Promoter addition rates; and

(l) Hourly and daily SO2, NOx, CO and O2 concentrations.

Upon request by EPA, CRRM shall submit any additional available data that EPA determines it needs to evaluate the model. The report describing the model shall include a description of how the model was developed including which parameters were considered, why parameters were eliminated, efforts and results of model validation, and statistical methods used to arrive at the equation to predict uncontrolled SO2 concentration and mass emission rate.

iii. SO2 Reducing Catalyst Additives - Optimization Study

33. By no later than February 28, 2005, CRRM shall submit, for EPA approval, a proposed protocol consistent with the requirements of Appendix 1 for optimization studies to establish the optimized SO2 Reducing Additive rate for the FCCU. The protocol shall include identification of at least two SO2 reducing catalyst additives commercially available that are likely to perform the best in the FCCU, methods to calculate effectiveness, cost effectiveness, methods for baseloading, and percent additive to be used at each increment tested. EPA will

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either approve one of the proposed catalysts or approve another catalyst that is commercially available. In the event CRRM disputes EPA's catalyst selection, the issue is subject to dispute resolution.

34. Within 30 days of EPA approval of the optimization protocol, CRRM shall commence an eight month optimization study of the SO2 Reducing Additive in accordance with the approved protocol and Appendix 1.

35. Within 30 days of completion of the optimization study, CRRM shall submit a report to EPA and KDHE that contains the results of the optimization study and propose an optimized addition rates of the SO2 Reducing Catalyst Additive to be used for the demonstration period for EPA approval. Upon request by EPA, CRRM shall submit any additional available data that EPA determines it needs to evaluate the optimization study.

iv. SO2 Reducing Catalyst Additives - Demonstration

36. Within 30 days of EPA approval of the optimization study report, CRRM shall commence an 18 month demonstration of the EPA approved SO2 Reducing Additive at the EPA approved optimization addition rate.

37. During the demonstration period, CRRM shall add SO2 Reducing Catalyst Additive and operate the FCCU in a manner that minimizes SO2 emissions to the extent practicable and without interfering with conversion or processing rates.

38. Within 90 days of completion of the demonstration, CRRM shall submit a report to EPA and KDHE that contains the results of the demonstration ("SO2 Additive Demonstration Report"). The SO2 Additive Demonstration Report shall include, at a minimum, the SO2 and O2 CEMS data recorded during the Demonstration Period and all applicable baseline data on a daily average basis for the Demonstration Period.

v. Establishing SO2 Interim Emission Limits

39. In the SO2 Additive Demonstration Report, CRRM shall propose a short term 7-day rolling average and a long-term 365-day rolling average concentration-based (ppmvd) SO2 emission limit as measured at 0% O2. CRRM shall comply with the emission limits it proposes for the FCCU immediately upon submission of the SO2 Additive Demonstration Report and shall add SO2 Reducing Catalyst Additive at no less than the optimized rate. CRRM shall continue to comply with these limits and add SO2 Reducing Catalyst Additive at no less than the optimized rate until CRRM is required to comply with the emissions limits set by EPA pursuant to Paragraph 40, below. Upon request by EPA, CRRM shall submit any additional, available data that EPA determines it needs to evaluate the demonstration.

40. EPA will use the data collected about the FCCU during the baseline period, the Optimization Period, and the Demonstration Period, as well as all other available and relevant information, to establish limits for SO2 emissions from the FCCU. EPA will establish a short term 7-day rolling average and a 365-day rolling average concentration-based (ppmvd) SO2 emission limits corrected to 0% oxygen. EPA will determine the limits based on: (i) the level of performance during the baseline, Optimization and Demonstration periods; (ii) a reasonable certainty of compliance; and (iii) any other available and relevant information. EPA will notify CRRM of its determination of the concentration-based SO2 emissions limits and averaging times for the FCCU. CRRM shall immediately (or within ninety (90) days, if EPA's limit is more stringent than the limit proposed by CRRM) operate the FCCU so as to comply with the EPA-established emission limits.

41. In lieu of utilizing SO2 reducing catalyst additives at the optimized SO2 reducing catalyst additive addition rate, at any time after the final limits have been established pursuant to

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Paragraphs 39 and 40 CRRM may elect to comply with the SO2 emission limit at the FCCU using other means. This election shall be effective upon written notification by CRRM to EPA and KDHE.

B. Compliance with Final SO2 Emission Limits

42. By no later than December 31, 2010, CRRM shall install a Wet Gas Scrubber or another alternative technology approved in writing by EPA and KDHE on the FCCU to comply with the following SO2 emissions limits on the FCCU exhaust stream:

° 25 ppmvd @ 0% O2 on a 365 day rolling average basis, and

° 50 ppmvd @ 0% O2 on a seven (7) day rolling average basis.

43. By no later than June 1, 2008, CRRM shall submit a project schedule to EPA and KDHE for the installation of the SO2 air pollution control technology selected to be installed on the FCCU to comply with the SO2 emission limits in Paragraph 42. The project schedule will be enforceable under this Consent Decree and shall include dates for the following milestone events:

a. Date for final selection of SO2 control technology to be installed on FCCU,

b. Start date for the procurement of the SO2 air pollution controls,

c. Start of construction date,

d. Initial start-up date,

e. Date of compliance with SO2 emission limits.

VI. PM EMISSIONS REDUCTIONS FROM FCCU

44. By no later than December 31, 2010, CRRM shall comply with an FCCU emission limit of 0.5 pounds of PM per 1,000 pounds of coke burned on a 3-hour average basis

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through the operation of an electrostatic precipitator (ESP) or other means. Emissions during periods of Startup, Shutdown, or Malfunction shall not be used in determining compliance with the emission limits of 0.5 pounds of PM per 1,000 pounds of coke burned on a 3-hour average basis, provided that during such periods CRRM implements good air pollution control practices to minimize PM emissions.

45. By no later than three (3) months after the PM limit in Paragraph 44 becomes effective, CRRM shall submit a stack test protocol consistent with 40 C.F.R. § 60.106(B)(2) to EPA and KDHE for review and for KDHE approval.

46. By no later than six (6) months after the PM limit in Paragraph 44 becomes effective, CRRM shall conduct the first stack test to demonstrate compliance with the PM emission limit. CRRM shall conduct two additional stack tests at the FCCU to demonstrate compliance with the PM emission limit, two and four years after the first stack test. Stack test results shall be submitted to EPA and KDHE 60 days after completion of the test.

VII. CONTINUOUS EMISSIONS MONITORS

47. By no later than six (6) months after the Date of Lodging of the Consent Decree, CRRM shall use NOx, SO2 and O2 CEMs to monitor performance of the FCCU and to determine compliance with the terms and conditions of this Consent Decree. The CEMs will be used to demonstrate compliance with the NOx and SO2 emission limits established pursuant to Sections IV and V.

48. [INTENTIONALLY LEFT BLANK]

49. CRRM shall certify, calibrate, maintain, and operate all CEMs required by this Consent Decree in accordance with the requirements of 40 C.F.R.§ 60.13, that are applicable to CEMs (excluding those provisions applicable only to Continuous Opacity Monitoring Systems)

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and Part 60 Appendices A and F, and the applicable performance specification test of 40 C.F.R. Part 60 Appendix B. With respect to 40 C.F.R. Part 60 Appendix F, in lieu of the requirements of 40 C.F.R. Part 60 Appendix F §§ 5.1.1, 5.1.3 and 5.1.4, CRRM shall conduct either a Relative Accuracy Audit ("RAA") or a Relative Accuracy Test Audit ("RATA") on each CEMs at least once every three (3) years. CRRM shall also conduct Cylinder Gas Audits ("CGA") each calendar quarter during which a RAA or a RATA is not performed.

50. CRRM shall make all CEMs and process data available to EPA and KDHE upon request.

VIII. BENZENE WASTE NESHAP

51. Benzene Waste NESHAP Program Enhancements. In addition to continuing to comply with all applicable requirements of 40 C.F.R. Part 61, Subpart FF ("Benzene Waste NESHAP" or "Subpart FF"), CRRM agrees to undertake, at the refinery, the measures set forth in Paragraphs 51.B through 51.N to ensure continuing compliance with Subpart FF and to minimize or eliminate fugitive benzene waste emissions.

A. Current Compliance Status. As of the Date of Lodging of this Consent Decree, CRRM believes that the refinery has a Total Annual Benzene ("TAB") of less than 10 Mg/yr. CRRM will review and verify the TAB at the refinery consistent with the requirements of Paragraph 51.C.

B. Refinery Compliance Status Changes. If at any time from the Date of Lodging of the Consent Decree until its termination, the refinery is determined to have a TAB equal to or greater than 10 Mg/yr, CRRM shall comply with the compliance option set forth at 40 C.F.R. § 61.342(e) (hereinafter referred to as the "6 BQ compliance option").

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C. One-Time Review and Verification of the Refinery's TAB.

i. Phase One of the Review and Verification Process. By no later than September 30, 2005, CRRM shall complete a review and verification of the TAB of the refinery. For the refinery, the review and verification process shall include, but is not limited to: (i) an identification of each waste stream that is required to be included in the refinery's TAB (e.g., slop oil, tank water draws, spent caustic, desalter rag layer dumps, desalter vessel process sampling points, other sample wastes, maintenance wastes, and turnaround wastes); (ii) a review and identification of the calculations and/or measurements used to determine the flows of each waste stream for the purpose of ensuring the accuracy of the annual waste quantity for each waste stream; (iii) an identification of the benzene concentration in each waste stream, including sampling for benzene concentration at no less than 10 waste streams consistent with the requirements of 40 C.F.R. § 61.355(c)(1) and (3); provided however, that previous analytical data or documented knowledge of waste streams may be used, 40 C.F.R. § 61.355(c)(2), for streams not sampled; and (iv) an identification of whether or not the stream is controlled consistent with the requirements of Subpart FF. By no later than sixty (60) days following the completion of Phase One of the review and verification process, CRRM shall submit a Benzene Waste NESHAP Compliance Review and Verification report ("BWN Compliance Review and Verification Report") that sets forth the results of Phase One, including but not limited to the items identified in (i) through (iv) of this Paragraph 51.C.i.

ii. Phase Two of the Review and Verification Process. Based on EPA's review of the BWN Compliance Review and Verification Report(s), EPA may select up to 20 additional waste streams at the refinery for sampling for benzene concentration. CRRM will conduct the required sampling and submit the results to EPA within ninety (90) days of

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receipt of EPA's request. CRRM will use the results of this additional sampling to recalculate the TAB and to amend the BWN Compliance Review and Verification Report, as needed. To the extent that EPA requires CRRM to re-sample a Phase One waste stream as part of this Phase Two review, CRRM may average the results of the two sampling events. CRRM shall submit an amended BWN Compliance Review and Verification Report within ninety (90) days following the date of the completion of the required Phase Two sampling, if Phase Two sampling is required by EPA.

D. Implementation of Actions Necessary to Correct Non-Compliance.

i. Amended TAB Reports. If the results of the BWN Compliance Review and Verification Report(s) indicate(s) that the refinery has failed to file the reports required by 40 C.F.R. § 61.357(c), or that the refinery's most recently-filed report is inaccurate and/or does not satisfy the requirements of Subpart FF, CRRM shall submit, by no later than sixty (60) days after completion of the BWN Compliance Review and Verification Report(s), an amended TAB report to the Applicable State Agency. CRRM's BWN Compliance Review and Verification Report(s) shall be deemed an amended TAB report for purposes of Subpart FF reporting to EPA.

ii. If the results of the BWN Compliance Review and Verification Report indicate that the refinery has a TAB of over 10 Mg/yr, CRRM shall submit to the Applicable Federal and State Agencies by no later than 180 days after completion of the BWN Compliance Review and Verification Report, a plan that identifies with specificity the compliance strategy and schedule that CRRM will implement to ensure that the refinery complies with the 6 BQ compliance option as soon as practicable.

iii. Review and Approval of Plans Submitted Pursuant to Paragraph

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51.D.ii. Any plan submitted pursuant to Paragraph 51.D.ii shall be subject to the approval of, disapproval of, or modification by EPA, which shall act in consultation with the Applicable State Agency. Within sixty (60) days after receiving any notification of disapproval or request for modification from EPA, CRRM shall submit to the Applicable Federal and State Agencies a revised plan that responds to all identified deficiencies. Upon receipt of approval or approval with conditions, CRRM shall implement the plan. Disputes arising under this Paragraph 51.D.iii. shall be resolved in accordance with the dispute resolution provisions of this Decree.

iv. Certification of Compliance with the 6 BQ Compliance Option. By no later than thirty (30) days after completion of the implementation of all actions, if any, required pursuant to Paragraph 51.D.ii or pursuant to Paragraph 51.J.vi to come into compliance with the 6 BQ Compliance Option, CRRM shall submit a report to the Applicable Federal and State Agencies that, as to the refinery, the refinery complies with the Benzene Waste NESHAP.

E. Annual Program. CRRM shall establish an annual program of reviewing process information for the refinery, including but not limited to construction projects, to ensure that all new benzene waste streams are included in the refinery's waste stream inventory.

F. Benzene Spills. For each spill at the refinery, CRRM shall review such spills to determine if benzene waste was generated. CRRM shall include benzene generated by such spills in the TAB for the refinery.

G. Training.

i. If and when the refinery's TAB reaches 1 Mg/yr or more, then by no later than 180 days from the receipt of the information showing that the refinery's TAB has reached or exceeded 1 Mg/yr, CRRM shall develop and begin implementation of annual (i.e., once each calendar year) training for all employees asked to draw benzene waste samples.

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ii. If and when the refinery's TAB reaches 10 Mg/yr or more, CRRM shall complete the development of standard operating procedures for all control equipment used to comply with the Benzene Waste NESHAP. CRRM shall complete an initial training program regarding these procedures for all operators assigned to this equipment. Comparable training shall be provided to any persons who subsequently become operators, prior to their assumption of this duty. "Refresher" training shall be performed on a periodic basis. CRRM shall propose a schedule for the initial and refresher training at the same time that CRRM proposes a plan, pursuant to either Paragraph 51.D.ii, or Paragraph 51.J.vi, that identifies the compliance strategy and schedule that CRRM will implement to come into compliance with the 6 BQ compliance option.

iii. As part of CRRM's training program, CRRM must ensure that the employees of any contractors hired to perform the requirements of this Paragraph are properly trained to implement all provisions of this Paragraph at the refinery.

H. Waste/Slop/Off-Spec Oil Management.

i. By no later than June 30, 2005, CRRM shall submit to the Applicable Federal and State Agencies, for the refinery, schematics that: (a) depict the waste management units (including sewers) that handle, store, and transfer waste/slop/off-spec oil streams; (b) identify the control status of each waste management unit; and (c) show how such oil is transferred within the refinery. Representatives from CRRM and EPA thereafter shall confer about the appropriate characterization of the refinery's waste/slop/off-spec oil streams for the waste management units handling such oil streams, for purposes of the refinery's TAB calculation. At a mutually-agreed upon time, CRRM shall submit, if necessary, revised schematics that reflect the agreements between EPA and CRRM regarding the characterization

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of these oil streams and the appropriate control standards.

ii. Organic Benzene Waste Streams. If and when the refinery's TAB reaches 10 Mg/yr and a compliance strategy is approved, all waste management units handling "organic" benzene wastes, as defined in Subpart FF, shall meet the applicable control standards of Subpart FF. If, as a result of the discussions between the EPA and CRRM, pursuant to Paragraph 51.H.i, EPA and CRRM agree that controls not already in place are necessary on any waste management unit handling organic benzene wastes, the Parties shall agree, in writing, to a schedule, not to exceed two years, for the completion of the installation of the necessary controls.

iii. Aqueous Benzene Waste Streams. For purposes of calculating the refinery's TAB pursuant to the requirements of 40 C.F.R. § 61.342(a), CRRM shall include all waste/slop/off-spec oil streams that become "aqueous" until such streams are recycled to a process or put into a process feed tank (unless the tank is used primarily for the storage of wastes). If and when the refinery's TAB reaches 10 Mg/yr, then, for purposes of complying with the 6BQ compliance option, all waste management units handling aqueous benzene waste streams shall either meet the applicable control standards of Subpart FF or shall have their uncontrolled benzene quantity count toward the applicable 6 megagram limit.

iv. Plan to Quantify Uncontrolled Waste/Slop/Off-Spec Oil Streams. By no later than ninety (90) days after EPA has approved the schematics (revised if necessary) required under Paragraph 51.H.i., CRRM shall submit, for the refinery, a plan(s) to quantify waste/slop/off-spec oil movements for all benzene waste streams which are not controlled. EPA will review the plan and may recommend revisions consistent with Subpart FF. Upon plan approval, CRRM shall maintain records quantifying such movements.

v. Disputes under this Paragraph 51.H. shall be resolved in

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accordance with the dispute resolution provisions of this Consent Decree.

I. End of Line Sampling (If the Refinery is Found to Have a TAB of 10 Mg/yr or More). The provisions of this Paragraph 51.I shall apply after the refinery's TAB reaches or exceeds 10 Mg/yr and after the refinery has completed implementation of an approved compliance plan submitted pursuant to either Paragraph 51.D.ii, or Paragraph 51.J.vi. The provisions shall continue to apply until termination ("Applicability Dates for Paragraph 51.I.").

i. By no later than sixty (60) days after the certification required by Paragraph 51.D.iv, CRRM shall submit to EPA for approval a plan(s) for an "end of the line" ("EOL") determination of the benzene quantity in uncontrolled waste streams. A copy of this plan shall be submitted to the Applicable State Agency. The proposed plan of CRRM, as applicable, shall include, but not be limited to, sampling locations, methods for flow calculations, and the assumed volatilization rate(s) to be used in calculating the uncontrolled benzene quantity. Any disputes regarding plan approval under this Paragraph 51.I. shall be resolved in accordance with the dispute resolution provisions of the Consent Decree.

ii. If, during the Applicability Dates for Paragraph 51.I, changes in processes, operations, or other factors lead CRRM, as applicable, to conclude that the approved sampling locations, approved methods for determining flow calculations, and/or assumed volatilization rates no longer provide an accurate measure of the refinery's EOL benzene quantity, CRRM shall submit a revised plan to EPA for approval. A copy of this revised plan also shall be provided to the Applicable State Agency.

iii. On a monthly basis, CRRM shall conduct EOL sampling, commencing during the first month of the first full calendar quarter after CRRM receives written approval from EPA of the sampling plan for the refinery. CRRM shall take, and have analyzed,

three representative samples from each approved sampling location. CRRM shall use the average of these three samples as the benzene concentration for the stream at the approved location. Based on the EOL monthly sampling results, the approved flow calculations, and the volatilization assumptions, CRRM shall calculate the sum of the EOL benzene quantity for the three months contained within the respective quarter. Nothing in this Paragraph 51.I shall preclude CRRM from taking representative samples more frequently within any calendar month, provided that CRRM identifies the basis for the additional samples. Such samples shall be included in calculating the average monthly EOL benzene quantity.

iv. If the sum of the EOL benzene quantity for the three month period contained within a quarter equals or exceeds 1.2 Mg, CRRM shall take and have analyzed three representative samples, drawn on separate days during the subsequent calendar quarter, of each uncontrolled stream containing benzene over 0.05 Mg/yr, as identified in the later of (i) the final BWN Compliance Review and Verification Report; or (ii) the most recently submitted TAB report (hereinafter "Sampling of >0.05 Streams"). CRRM shall undertake Sampling of >0.05 Streams for the purpose of trying to identify the cause or source of the potentially elevated benzene quantities.

v. CRRM shall continue to undertake Sampling of >0.05 Streams in the second quarter after the EOL benzene quantity exceeded 1.2 Mg unless either: (i) the EOL benzene quantity in the first quarter of the Sampling of > 0.05 Streams demonstrates that the refinery's EOL benzene quantity, prorated on a yearly basis, will be below 4.8 Mg/yr; or (ii) CRRM discovers and corrects the cause of the potentially elevated benzene quantities and EPA concurs in the diagnosis and corrective measures of CRRM.

vi. If the sum of the EOL benzene quantity for two consecutive

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quarters indicates that the EOL benzene quantity, prorated on a yearly basis, will exceed 4.8 Mg/yr, and CRRM has not discovered and corrected the cause of the potentially elevated benzene through the process of Sampling of >0.05 Streams, CRRM shall take and have analyzed three representative samples, drawn on separate days during the third calendar quarter, of each uncontrolled stream containing benzene over 0.03 Mg/yr, as identified in the later of (i) the final BWN Compliance Review and Verification Report; or (ii) most recently submitted TAB report (hereinafter "Sampling of > 0.03 Streams"). CRRM shall undertake Sampling of >0.03 Streams for the purpose of continuing to try to identify the cause or source of the potentially elevated benzene quantities.

vii. Sampling of >0.05 and/or >0.03 Streams shall not be required if CRRM advises EPA, and EPA concurs, that the potentially elevated benzene quantities can be attributed to an identifiable event, such as a spill to the sewer or a turnaround. After such an identifiable event, however, CRRM shall calculate its projected uncontrolled benzene quantity for the calendar year in which the event occurs. If that projection is greater than 6 mg/yr, then CRRM shall submit to EPA for approval a plan that either (a) identifies with specificity the compliance strategy and schedule that CRRM will implement to ensure that the refinery does not exceed 6 Megagrams of uncontrolled benzene for the calendar year; or (b) if as a result of the quantity of benzene released during the event CRRM is unable to propose a plan to ensure that the refinery's uncontrolled benzene for the calendar year will be 6 Megagrams or less, then CRRM shall identify the actions to be taken to minimize the uncontrolled benzene for the remainder of the year. A copy of this plan shall be submitted to the Applicable State Agency. CRRM shall submit this plan within thirty (30) days after the end of the quarter which resulted in a projection of greater than 6 Mg/yr of uncontrolled benzene. Sampling of >0.05 and/or >0.03

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Streams shall not excuse CRRM from continuing to take monthly EOL samples.

viii. If in three consecutive quarters (a) the sum of the benzene quantity indicates that the EOL benzene quantity, prorated on a yearly basis, will exceed 4.8 Mg; or (b) the sampling of >0.05 and/or >0.03 streams indicates that projected uncontrolled benzene for the calendar year will exceed 6 Megagrams, and CRRM has not discovered and corrected, with EPA's concurrence, the cause of the potentially elevated benzene through the process of Sampling of >0.05 and >0.03 Streams, then, in the fourth quarter, CRRM shall retain a third party contractor to undertake a comprehensive TAB study and compliance review ("Third-Party TAB Study and Compliance Review"). By no later than the last day of the fourth quarter, CRRM shall submit a proposal to the Applicable Federal and State Agencies that identifies the contractor, the contractor's scope of work, and the contractor's schedule for the Third-Party TAB Study and Compliance Review. Unless, within thirty (30) days after EPA receives this proposal, EPA disapproves or seeks modifications, CRRM shall authorize the contractor to commence work. By no later than thirty (30) days after CRRM receives the results of the Third-Party TAB Study and Compliance Review, CRRM shall submit the results to the Applicable Federal and State Agencies. EPA, the Applicable State Agency, CRRM subsequently shall discuss informally the results of the Third-Party TAB Study and Compliance Review. By no later than one-hundred twenty (120) days after CRRM receives the results of the Third-Party TAB Study and Compliance Review, or such other time as CRRM and EPA may agree, CRRM shall submit to EPA for approval a plan that addresses any deficiencies identified in the Third-Party TAB Study and Compliance Review and any deficiencies that EPA brought to the attention of CRRM as a result of the Third-Party TAB Study and Compliance Review. A copy of this plan shall be submitted to the Applicable State Agency. The review and approval of this Plan shall be done in

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accordance with Paragraph 51.D.iii of this Decree. Certification of Compliance shall be done in accordance with Paragraph 51.D.iv.

J. End of Line Sampling (TAB is equal to or greater than 1 Mg/yr but less than 10 Mg/yr). The provisions of this Paragraph 51.J shall apply from the date that the final BWN Compliance Review and Verification Report submitted for the refinery pursuant to Paragraph 51.C shows that the refinery's TAB is equal to or greater than 1 Mg/yr but less than 10 Mg/yr, through the earlier of: (1) the time that the refinery reaches a TAB of 10 Mg/yr or more (in which case, the provisions of Paragraph 51.I shall begin to apply); or (2) termination of the Consent Decree.

i. CRRM shall once per calendar year, conduct sampling, consistent with the requirements of 40 C.F.R. § 61.355(c)(1) and (3), of all waste streams containing benzene that contributed 0.05 Mg/yr or more to the TAB set forth in the final BWN Compliance Review and Verification Report or in the previous year's TAB, whichever is later;

ii. By no later than ninety (90) days after the date of submitting the final BWN Compliance Review and Verification Report, representatives from EPA and the Applicable State Agency shall meet at the refinery with representatives from CRRM for the purpose of identifying an appropriate procedure for conducting EOL sampling and measuring EOL benzene quantities at the refinery. EPA, the Applicable State Agency, and CRRM shall confer about potential EOL sample locations and shall review process and flow information and oil movement transfers. By no later than sixty (60) days after EPA and the Applicable State Agency have met with CRRM at the refinery, CRRM shall submit a plan to EPA for approval that contains proposed sampling locations and methods for flow calculations to be used in the EOL determination of benzene quantity. A copy of this plan shall be submitted to the Applicable

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State Agency. Any disputes regarding plan approval under this Paragraph 51.J shall be resolved in accordance with the dispute resolution provisions of this Consent Decree. If, during the life of this Consent Decree, changes in processes, operations, or other factors lead CRRM to conclude that either the approved sampling locations and/or the approved methods for determining flow calculations no longer provide an accurate measure of the refinery's EOL benzene quantity, CRRM shall submit a revised plan to EPA for approval. A copy of this revised plan also shall be submitted to the Applicable State Agency.

iii. On a quarterly basis, CRRM shall conduct an EOL determination of benzene quantity, commencing in the first full calendar quarter after CRRM receives written approval from EPA of the sampling plan for the refinery. CRRM shall take, and have analyzed, at least three representative samples from each approved sampling location. CRRM shall use the average of these three samples as the benzene concentration for the stream at the approved location. Based on the EOL quarterly sampling results and the approved flow calculations, CRRM shall calculate the quarterly EOL benzene quantity.

iv. If the quarterly EOL benzene quantity exceeds 2.5 Mg, CRRM shall submit to the Applicable Federal and State Agencies a plan that identifies with specificity the actions that CRRM shall take, and the schedule for such actions, to ensure that the TAB for the refinery does not exceed 10 Mg in the calendar year.

v. On a quarterly basis, CRRM shall also calculate a projected calendar year TAB, utilizing all EOL results for that calendar year and any other information (such as process turnarounds) to undertake the projection. If the projected calendar year calculation of the TAB at the refinery equals or exceeds 10 Mg, CRRM shall submit to the Applicable Federal and State Agencies a plan that identifies with specificity the actions that

CRRM shall take, and the schedule for such actions, to ensure that the TAB for the refinery does not exceed 10 Mg in the calendar year. CRRM shall submit this plan within thirty (30) days after the end of the quarter which resulted in a projection of greater than 10 Mg.

vi. If it appears that appropriate actions cannot be taken to ensure that the refinery maintains a TAB of under 10 Mg/yr, then CRRM shall retain a third party contractor to undertake a comprehensive TAB study and compliance review ("Third-Party TAB Study and Compliance Review"). At a mutually agreed upon date, CRRM shall submit a proposal to the Applicable Federal and State Agencies that identifies the contractor, the contractor's scope of work, and the contractor's schedule for the Third-Party TAB Study and Compliance Review. Unless, within thirty (30) days after EPA receives this proposal, EPA disapproves or seeks modifications, CRRM, as applicable, shall authorize the contractor to commence work. By no later than sixty (60) days after CRRM receives the results of the Third-Party TAB Study and Compliance Review, CRRM shall submit the results to the Applicable Federal and State Agencies. EPA, the Applicable State Agency, and CRRM subsequently shall discuss informally the results of the Third-Party TAB Study and Compliance Review. By no later than 120 days after CRRM receives the results of the Third-Party TAB Study and Compliance Review, or such other time as CRRM and EPA may agree, CRRM shall submit to EPA for approval a plan that identifies with specificity the compliance strategy and schedule that CRRM will implement to ensure that the refinery complies with the 6BQ compliance option as soon as practicable. A copy of this Plan shall be submitted to the Applicable State Agency. The review and approval of this Plan shall be done in accordance with Paragraph 51.D.iii of this Decree. Certification of Compliance shall be done in accordance with Paragraph 51.D.iv.

K. Miscellaneous Measures.

i. CRRM, as and to the extent applicable, shall comply with the Benzene Waste NESHAP provisions applicable to groundwater remediation conveyance systems if its refinery has such a system.

ii. The provisions of this Paragraph 51.K.ii shall apply after the refinery's TAB reaches or exceeds 10 Mg/yr (if prior to termination of the Consent Decree) and after the refinery has completed implementation of an approved compliance plan submitted pursuant to either Paragraph 51.D.ii or Paragraph 51.J.vi. The provisions shall continue to apply until termination of the Consent Decree. CRRM shall:

a. Conduct monthly visual inspections of all water traps within the refinery's individual drain systems; and

b. On a weekly basis, visually inspect all conservation vents or indicators on process sewers for detectable leaks; reset any vents where leaks are detected; and record the results of the inspections. After two (2) years of weekly inspections, and based upon an evaluation of the recorded results, CRRM may submit a request to the applicable EPA Region to modify the frequency of the inspections. EPA shall not unreasonably withhold its consent. Nothing in this Paragraph 51.K.ii.b. shall require CRRM to monitor conservation vents on fixed roof tanks.

c. From the date that the final BWN Compliance Review and Verification Report submitted for the refinery pursuant to Paragraph 51.C shows that the refinery's TAB is equal to or greater than 1 Mg/yr but less than 10 Mg/yr, and through termination of this Consent Decree, CRRM shall identify and mark all area drains that are segregated stormwater drains.

L. Projects/Investigations. Unless and until the TAB of the refinery reaches or exceeds 10 Mg/yr (or the Consent Decree is terminated), CRRM will not be required to undertake any projects or any investigations relating to the Benzene Waste NESHAP other than those required in Paragraphs 51.C - 51.K. Within 60 days of receipt of information indicating that the TAB of the refinery has reached or exceeded 10 Mg/yr, EPA and CRRM shall meet and

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confer to discuss and establish an appropriate project or investigation relating to the Benzene Waste NESHAP.

M. Recordkeeping and Reporting Requirements for this Paragraph

i. Outside of the Reports Required under 40 C.F.R. § 61.357 and under the Semi-Annual Progress Report Procedures of Section XIV (Recordkeeping and Reporting). At the times specified in the applicable provisions of this Paragraph, CRRM shall submit, as and to the extent required, the following reports to the Applicable Federal and State Agencies:

a. BWN Compliance Review and Verification Report (51.C.i.), as amended, if necessary (51.C.ii.);
b. Amended TAB Report, if necessary (51.D.i.);
c. Plan for the refinery to come into compliance with the 6 BQ compliance option upon discovering that its TAB equals or exceeds 10 Mg/yr through the BWN Compliance Review and Verification Report (51.D.ii.), or the Third-Party TAB Study and Compliance Review that may result from EOL sampling (51.J.vi);
d. Compliance certification, if necessary (51.D.iv.);
e. Schematics of waste/slop/off-spec oil movements (51.H.i.), as revised, if necessary (51.H.i.);
f. Schedule to complete implementation of controls on waste management units handling organic benzene waste, if necessary (51.H.ii.);
g. Plan to quantify uncontrolled waste/slop/off-spec oil movements (51.H.iv.)
h. EOL Sampling Plans (51.I.i., 51.J.ii,), and revised EOL Sampling Plans, if necessary (51.I.ii., 51.J.ii.);
i. Plan, if necessary, to ensure that uncontrolled benzene does not equal or exceed, as applicable, 6 or 10 Mg/yr -- or is minimized -- based on projected calendar year uncontrolled benzene quantities as determined through EOL sampling (51.I.vii., 51.J.iv.-v.)
j. Proposal for a Third-Party TAB Study and Compliance Review, if necessary (51.I.viii., 51.J.vi.);
k. Third-Party TAB Study and Compliance Review, if necessary (51.I.viii., 51.J.vi.);
l. Plan to implement the results of the Third-Party TAB Study and Compliance Review, if necessary (51.I.viii., 51.J.vi.).

ii. As part of the Reports Required under the Semi-Annual Progress

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Report Procedures of Section XIV (Recordkeeping and Reporting).

a. TAB is equal to or greater than 1 Mg/yr but less than 10 Mg/yr. From the date that the final BWN Compliance Review and Verification Report submitted for the refinery pursuant to Paragraph 51.C shows that the refinery's TAB is equal to or greater than 1 Mg/yr but less than 10 Mg/yr, until the earlier of: (1) the time that the refinery reaches a TAB of 10 Mg/yr or more (in which case, the provisions of Paragraph 51.M.ii.b shall begin to apply); or (2) termination of the Consent Decree, CRRM shall submit the following information in Semi-Annual Progress Reports pursuant to the requirements of Section XIV of this Consent Decree:

(1) A description of the measures that it/they took to comply with the training provisions of Paragraph 51.G.;

(2) The annual, non-EOL sampling required at the refinery pursuant to the requirements of Paragraph 51.J.i (this information shall be submitted in the first quarterly progress report for the first calendar quarter of each year);

(3) The results of the quarterly EOL sampling undertaken pursuant to Paragraph 51.J.iii. for the calendar quarter. The report shall include a list of all waste streams sampled, the results of the benzene analysis for each sample, and the computation of the EOL benzene quantity for the respective quarter. The refinery shall identify whether the quarterly benzene quantity equals or exceeds 2.5 Mg and whether the projected calendar year benzene quantity equals or exceeds 10 Mg. If either condition is met, the refinery shall include in the quarterly report the plan required pursuant to Paragraph 51.J.iv and/or 51.J.v., and shall specifically seek EPA's concurrence in the plan.

b. TAB is 10 Mg/yr or More. The provisions of this Paragraph 51.M.ii.b shall apply after the refinery's TAB reaches or exceeds 10 Mg/yr (if this occurs prior to termination of the Consent Decree) and after the refinery has completed implementation of an approved compliance plan submitted pursuant to either Paragraph 51.D.ii, or Paragraph 51.J.vi. The provisions shall continue to apply until termination. CRRM shall submit the following

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information in Quarterly Progress Reports pursuant to the requirements of Section IX of this Consent Decree:

(1) A description of the measures that it took to comply with the training provisions of Paragraph 51.G.;

(2) The results of the three months of monthly EOL sampling undertaken pursuant to Paragraph 51.I.iii. for the calendar quarter. The report shall include a list of all waste streams sampled, the results of the benzene analysis for each sample, and the computation of the EOL benzene quantity for the three months contained within the respective quarter;

(3) If the quarter is one in which CRRM is required to undertake Sampling of >0.05 Streams or Sampling of >0.03 Streams at the refinery, CRRM also shall: (A) submit the results of those sampling events; (B) describe the actions that CRRM is taking to identify and correct the source of the potentially elevated benzene quantities; and (C) to the extent that CRRM identifies actions to correct the potentially elevated benzene quantities, specifically seek EPA's concurrence with the proposal of CRRM.

N. Agencies to Receive Reports, Plans and Certifications Required in the Paragraph; Number of Copies. CRRM shall submit all reports, plans and certifications required to be submitted under this Paragraph to the Applicable Federal and State Agencies. For each submission, CRRM shall submit two copies to EPA, to the applicable Region, and to the Applicable State Agency. By agreement between each of the offices that are to receive the materials in this Paragraph and CRRM the materials may be submitted electronically.

IX. SULFUR RECOVERY PLANTS

52. The Sulfur Recovery Plants (SRPs) at the refinery, which includes both Sulfur Recovery Units Numbers 1 and 2, are and shall be affected facilities under NSPS Subpart J upon the Date of Lodging of this Consent Decree. CRRM shall comply with all applicable requirements of 40 C.F.R., Part 60, Subparts A and J upon the Date of Lodging of the Consent Decree.

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53. All sour water stripper off-gas streams generated at the refinery shall be directed to the SRPs for processing and shall not be directed to the atmosphere. These requirements shall be incorporated into a construction permit as a federally enforceable permit condition.

X. OTHER EMISSIONS CONTROLS

A. No. 2 Crude Unit Heater and No. 3 Vacuum Unit Heater

54. By no later than January 1, 2007, CRRM shall reduce NOx emissions from the No. 2 Crude Unit Heater and No. 3 Vacuum Unit Heater and shall thereafter comply with an emission limit of 0.025 lb/mmBTU for each heater on a 3-hour average basis. These limits shall be incorporated into a construction permit as federally enforceable permit conditions.

55. By no later than six (6) months after the NOx emissions are reduced for each heater as set forth in Paragraph 54, CRRM shall demonstrate compliance with the emission limit by conducting an initial performance test using Method 7E or an EPA-approved alternative test method. At least ninety (90) days prior to conducting the initial performance test, CRRM shall submit a stack test protocol to EPA and KDHE for review and for KDHE approval. The results of these tests shall be based upon the average of three (3) one hour testing periods in accordance with EPA methods at 40 C.F.R. Part 60 Appendix A and shall be submitted to EPA within 60 days of completion of the test.

B. RADCO Crude Heater

56. By no later than the Date of Entry of this Consent Decree, CRRM shall limit NOx emissions from the RADCO Crude Heater to less than 81.7 tpy, which when considered with netting credits approved pursuant to the Consent Decree, results in emissions below the PSD applicability threshold set forth at 40 C.F.R. § 52.21. Prior to the stack test to be conducted pursuant to Paragraph 57, compliance with the 81.7 tpy NOx emission limit shall be determined

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by the following equation:

$$\sum_{i=1}^{n} [Q_f(\text{mmscf/month}) \times H_{v(ave)}(\text{Btu/scf}) \times E_f(\text{lb}_{NOx}/\text{mmBtu}) \times (\text{ton}/2000\ \text{lbs})] < 81.7(\text{tpy})$$

where;

n = 12

Q_f = total fuel gas usage (mmscf/month) in month *i*

$H_{v(ave)}$ = arithmetic average of all gross heating value measurements for refinery fuel gas in month *I*

E_f = 0.13lb/NOx per MMBtu (NOx emission factor)

CRRM shall monitor and record the gross By no later than February 28, 2007, CRRM shall submit a performance test protocol to EPA and KDHE for review and for KDHE approval. CRRM shall conduct the initial performance test within sixty days after KDHE approves the protocol and submit the results within sixty days of completion of the test heating value of the fuel gas combusted in the heater at least two (2) times per week. CRRM shall maintain records demonstrating the NOx emission limit in equation 1 has not been exceeded for a continuous 12 month period (12 month rolling sum). Reports shall be updated monthly, no later than the last day of the following calendar month.

57. Nothing in this Consent Decree prohibits CRRM from generating or using emission reduction credits obtained by further restricting emissions from the RADCO heater below the 81.7 tpy limit through retrofitting the heater with enhanced controls, taking a federally enforceable permit limit restricting emissions below 81.7 tons per year or other means.

C. Pressure Relief Valves

58. In compliance with the notification provisions of 40 C.F.R. § 60.7, CRRM has provided a list to EPA and KDHE of pressure relief valves routed to a common header that are

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subject to Subpart GGG, attached as Appendix 2.

59. By the earlier of completion of the next refinery turnaround or December 31, 2006, CRRM shall complete the installation of rupture disks prior to all pressure relief valves routed to a common header that are subject to and not currently in compliance with 40 C.F.R. Part 60, Subparts A and GGG. By February 1, 2007, CRRM shall provide a list to EPA and KDHE of all pressure relief valves on which the installation of the rupture disks prior to the valves has been completed.

C. Flare on Coker Drum Depressurization Gas

60. By no later than the Date of Entry of the Consent Decree, CRRM shall maintain a water seal on the Coker Drum flare line that prevents the depressurization gas from bypassing the refinery's fuel gas collection compressor system and venting directly to the flare except for the combustion in the flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions.

D. Flare on API Separator Off-Gas Scrubber

61. Farmland Industries, Inc. has applied to EPA for an alternative monitoring plan "AMP" under 40 C.F.R. § 60.13(i) for the gas stream from the API separator off-gas scrubber in order to demonstrate compliance with NSPS Subpart J for the flare, which request has been assumed by CRRM. Within 90 days of EPA's final determination of the approvability of the AMP, CRRM shall comply with the monitoring requirements of Subpart J through compliance with an EPA-approved AMP, the installation and operation of a hydrogen sulfide CEMs on the gas stream, or by process changes to re-route the gas stream.

E. No. 1 Crude Tower Vent Stream - VOC Streams

62. By no later than the Date of Entry of the Consent Decree, the No. 1 Crude Tower

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vent stream shall remain controlled, except during periods of startup, shutdown and malfunction.

F. Coal Usage – Coal Steam Boiler

63. By no later than the date of Lodging of this Consent Decree, CRRM shall restrict coal usage in the coal steam boiler to 9,433 tons or less of coal per year.

64. By no later than January 1, 2007, CRRM will strive to achieve a 53 ton reduction in actual NOx emissions. The NOx reductions shall be accomplished by the replacement of conventional burners with ultra-low NOx burners, or by other methods identified by CRRM. The amount of NOx reductions and the methods used to achieve the reductions shall be reported in the subsequent semi-annual report required pursuant to section XIV.

65. Beginning on January 1, 2007, CRRM may increase coal usage in the coal steam boiler to 15,416.5 tons of coal per year and beginning in January 1, 2008, coal usuage may increase to 21,400 ton per year provided that the actual NOx reductions achieved pursuant to Paragraph 64 above were equal to or greater than 53 tpy. If the actual NOx emissions are reduced by less than 53 tpy, coal usage in the coal steam boiler shall be increased by the amount and time periods shown below:

Date	Allowable Coal Usage (tpy)
January 1, 2007	$9{,}433 + \{[(Y/53) \times 11{,}967] / 2\}$
January 1, 2008	$9{,}433 + [(Y/53) \times 11{,}967]$
Date of start-up NOx FCCU controls	21,400

where; Y = Actual NOx reductions pursuant to Paragraph 64 above.

XI. CLEAN AIR ACT PERMITTING

66. By no later than six (6) months from the Date of Entry of the Consent Decree, CRRM shall submit to KDHE for review and approval a protocol for modeling increment

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consumption and NAAQS impacts for NOx, SO2 and PM.

67. By no later than six (6) months from receipt of KDHE approval of a protocol, CRRM shall submit a construction permit application to KDHE which shall include:

A. Modeling for increment consumption and NAAQS impacts for NOx, SO2, and PM, in accordance with the protocol approved by KDHE. If the increment consumption and/or modeling reveals that the refinery would have an impermissible impact on ambient air quality, the permit application shall include a compliance plan and schedule with short- and long-term operational restrictions and/or controls to reduce emissions as necessary to eliminate the impermissible impact on ambient air quality;

B. A request to incorporate final emission limits, standards, and methods for demonstrating compliance, as applicable, from Sections IV, V, VI , IX and X from this Consent Decree into federally enforceable permit conditions; and

C. A request to incorporate the limits set forth in Appendix 3 from all phases of the 1994-1995 refinery expansion project into federally enforceable permit conditions.

68. For purposes of claiming contemporaneous decreases for PSD permitting, as of the Date of Closing the baseline for NOx, SO2, VOC and PM at the refinery shall be zero (0). CRRM shall not generate or use any NOx, SO2, VOC or PM emissions reductions that result from any projects conducted, controls required, or limits established pursuant to the Consent Decree or in Appendix 3 as netting reductions or emission offsets in any PSD permit or permit proceeding; if, however: (1) CRRM modifies or constructs emission units for purposes of

compliance with Tier II gasoline or low sulfur diesel and (2) the actual emissions from the units that are subject to emission limits under this Consent Decree are below the emission limits required pursuant to this Consent Decree, CRRM may seek approval from EPA and KDHE to use the difference between the emissions of those newly constructed or modified units and the emission limits established under the Consent Decree as netting reductions or emission offsets for purposes of Tier II compliance PSD permitting. For purposes of seeking approval under this Paragraph, CRRM must demonstrate that the new or modified emissions unit (1) is being constructed or modified for purposes of compliance with Tier 2 gasoline or low sulfur diesel requirements; and (2) has a federally enforceable, non-Title V Permit that reflects: (a.) for heaters, compliance with an emission limit of 0.02 lbs per MMBtu on a 3-hour average basis; (b) for heaters and boilers, no liquid or solid fuel firing authorization and compliance with sulfur limits in NSPS, Subpart J; (c.) For FCCU, a limit of 20 ppmvd NOx corrected to 0% O_2 or less on a 365-day rolling average basis; or (d) for FCCU, a limit of 25 ppmvd SO_2 corrected to 0% O_2 or less on a 365-day rolling average basis.

69. By no later than six (6) months from receipt of KDHE approval of a protocol pursuant to Paragraph 66, CRRM shall update the pending Title V Class I Operating Permit Application previously submitted to KDHE by Farmland Industries, Inc.

70. Until such times as those limits become federally enforceable permit conditions, the limits set forth in Appendix 3 shall be enforceable emission limits under this Consent Decree.

XII. COMPLIANCE ACTIONS FOR RCRA REGULATED HAZARDOUS WASTE MANAGEMENT UNITS

71. Within thirty (30) days of the Date of Entry of this Consent Decree, CRRM and CRT each shall provide KDHE with completed Business Concern Disclosure Statements

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(BCDS), pursuant to K.S.A. 65-3437 and K.A.R. 28-31-9(b) and updated RCRA Part A applications, pursuant to 40 CFR 270.72(b), to reflect the change of ownership at the refinery and terminal. If a "parent" corporation, as defined at *www.kdhe.state.ks.us/waste/apps-hw/hw_bus_disclose2_instr.pdf* is providing financial assurance for CRRM and/or CRT, CRRM and/or CRT, as applicable, must complete BCDS Form I and the parent must complete BCDS Form II.

72. Within forty-five calendar (45) days after the Date of Entry of this Consent Decree and pursuant to K.A.R. 28-31-8 and 40 CFR §§ 265.142, 265.143, 265.144, and 265.145, CRRM for the refinery shall establish financial assurance for closure care of the regulated units identified in Paragraph 77.a.i. and ii., in the aggregate amount of $176,335 which may not include the use of (1) a "trust fund", unless such trust fund is fully funded for the costs of closure care at creation; (2) the "financial test"; or (3) the "corporate guarantee" (the "cash financial assurance"). CRRM and CRT shall submit to EPA and KDHE documentation that the amount of cash financial assurance for closure is being properly maintained. If requested by EPA and/or KDHE, CRRM (with respect to the refinery) and CRT (with respect to the terminal) shall make revisions to the amount of financial assurance required for closure care.

73. Within forty-five (45) calendar days after the Date of Entry of this Consent Decree, CRRM shall (with respect to the refinery) and CRT shall (with respect to the terminal), respectively, establish financial assurance for post-closure care for the refinery and terminal ($2,608,200 for the refinery; $149,150 for the terminal) in conformance with the financial assurance mechanisms described within 40 C.F.R. §§ 265.142, 265.143, 264.144, and 265.145.

74. Upon Entry of the Consent Decree and pursuant to the requirements of K.A.R. 28-31-8 and 40 CFR Part 265, Subpart F, CRRM shall assume operation of and maintain ground-water monitoring systems for the regulated units identified in Appendix 4, relating to the

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refinery, and CRT shall assume operations of and maintain ground-water monitoring systems for the regulated units identified in Appendix 4 relating to the terminal, according to the following terms:

a. Within forty-five (45) calendar days of the Date of Entry of the Consent Decree, CRRM (with respect to the refinery) and CRT (with respect to the terminal) shall designate in writing to EPA and KDHE monitoring well systems comprised of well locations that are sufficient in number and location to satisfy the requirements of 40 CFR § 265.91 (a) or (b) for each identified regulated unit specified in Appendix 4. To satisfy this requirement, CRRM and CRT, as applicable, may rely on wells installed pursuant to the 1994 Coffeyville AOC (Docket No. VII-94-H-0020).

b. CRRM and CRT, as applicable, shall sample the designated groundwater monitoring systems according to the frequency required for assessment monitoring, as set forth at 40 CFR § 265.93, and shall sample for the specific hazardous constituents required for sampling pursuant to the approved Sampling and Analysis Plans in place at the time of such sampling for each of the refinery and terminal, respectively.

c. By no later than March 1 of each year, CRRM (for the refinery) and CRT (for the terminal) shall submit to KDHE an annual report on the groundwater monitoring systems for the identified units in Appendix 4 prepared in accordance with the requirements of 40 CFR § 265.94(b).

d. In making an evaluation of what groundwater monitoring activities are required for the identified units in Appendix 4, CRRM (for the refinery)

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and CRT (for the terminal) may reference any investigative or remedial work previously conducted at each of the refinery and the terminal, respectively.

75. Within thirty (30) calendar days after the Date of Entry of the Consent Decree and pursuant to K.A.R.. 28-31-8 and 40 CFR § 265.147, CRRM shall establish and submit to EPA and KDHE documentation of liability coverage in the aggregate amount of at least $8,000,000 for sudden and nonsudden accidental occurrences at the refinery.

76. Within thirty (30) calendar days after the Date of Entry of this Consent Decree, CRRM shall submit to KDHE for review and approval revised post-closure plans for the Closed Surface Pond/Surge Impoundment (SWMUs 141, 142) and the Former Oily Ponds (Hazardous Waste Landfill - SWMU 93) for the refinery. CRT shall submit to KDHE for review and approval a revised post-closure plan for the Hazardous Waste Landfarm (SWMU 58) at the terminal. The revised post-closure plans shall name CRRM as the responsible party for the performance of all obligations required for post-closure care of the regulated units at the refinery and CRT as the responsible party for the performance of all obligations required for post-closure care of the regulated units at the terminal.

77. Within thirty (30) days after CRRM's receipt of EPA approval of the Final RCRA Corrective Measures Study for the refinery and pursuant to the requirements of K.A.R.. 28-31-8 and 40 CFR §§ 265.112 and 265.118, CRRM shall submit to KDHE for review and approval a revised facility closure/post-closure plan (hereinafter "closure/post-closure plan") as specified below. The approved post-closure plan shall name CRRM as the responsible party for the performance of all obligations required for post-closure care of the regulated units at the refinery.

a. The closure/post-closure plan for the refinery shall address the following

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units:

i. F037 Surface Ditches, F037 Equalization Basin and API ditch. The plan shall be designed to address the requirements for the closure and post-closure care of surface impoundments, as set forth at 40 CFR § 265.228;

ii. Heat Exchanger Bundle sludge (K050) cleaning areas and the Cooling Tower areas. The plan shall be designed to address the requirements for the closure and post-closure care for landfills, as set forth at 40 CFR § 265.3 10.

b. The closure/post-closure plan shall include a proposed groundwater assessment monitoring plan (GWMP) for the units identified in subparagraph a., above, designed to address the requirements for assessment monitoring as set forth at 40 CFR § 265.93, and consistent with the terms of the Sampling and Analysis Plans then in effect.

c. Upon CRRM's receipt of KDHE approval of the closure/post-closure plan, CRRM shall commence implementation of the plan in accordance with the requirements contained therein.

78. [INTENTIONALLY LEFT BLANK]

79. [INTENTIONALLY LEFT BLANK]

80. In making submissions pursuant to this Section relating to the closure/post-closure and/or groundwater monitoring activities required for the units identified in Appendix 4, CRRM and CRT may reference any closure plans previously submitted and/or any investigative or remedial work previously conducted at each of the refinery and terminal and need submit only those portions of the previously approved submissions necessary to reflect the changes in corporate ownership.

XIII. RCRA CORRECTIVE ACTION AND PERMIT COMPLIANCE REQUIREMENTS

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81. On or before the end of the public comment period of this Consent Decree, CRRM shall become a party to and thereby agree to perform the obligations under the Administrative Order on Consent for the refinery (RCRA Docket No. VII-94-H-0020). CRT shall become a party to and thereby agree to perform the obligations under the Administrative Order on Consent for the terminal (RCRA Docket No. VII-95-H-011).

82. On or before the end of the public comment period of this Consent Decree, but subject to Paragraph 87 below, CRRM and CRT, as applicable, shall establish and thereafter maintain financial assurance for on-site and off-site corrective action at the refinery and terminal as follows:

a. $3,202,989 for the performance of work required pursuant to the Administrative Orders on Consent referenced in Paragraph 81, above, which amount shall be divided between the refinery and terminal such that CRRM is responsible for $1,604,380. and CRT is responsible for $1,598,609.; and

b. $11,797,011 for the performance of RCRA corrective action which amount shall be contributed in total by CRRM and CRT.

83. The financial assurance required by Paragraph 82 shall be "cash financial assurance" (as defined in Paragraph 72, above) and shall be established in conformance with the financial assurance mechanisms described within 40 C.F.R. §§ 265.142, 265.143, 265.144, and 265.145.

84. Financial assurance for the performance of work required pursuant to the Administrative Orders on Consent as required by Paragraph 82.a. shall be maintained for the refinery until such time as CRRM is notified in writing by EPA that all such work is complete

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with respect to the refinery, and for the terminal until such time as CRT is notified in writing by EPA that all such work is complete with respect to the terminal. The amount of "cash financial assurance" will be reduced on an annual basis by the amount of money expended on work performed by CRRM and CRT during the previous year pursuant to EPA/KDHE approved workplans. In the event that the estimated cost of completion of the work under said Administrative Orders on Consent is greater than the remaining balance of cash financial assurance, CRRM and/or CRT (as applicable) shall establish financial assurance for the difference in conformance with the financial assurance mechanisms described within 40 C.F.R. §§ 265.142, 265.143, 265.144, and 265.145.

85. Financial assurance for the performance of RCRA corrective action at the refinery and terminal as required by Paragraph 82.b. shall be maintained until such time as financial assurance for RCRA corrective action at the refinery and terminal has been established pursuant to administrative orders or RCRA permits, or until EPA determines in writing that no further RCRA corrective action at the refinery and/or terminal is necessary. The amount of "cash financial assurance" will be reduced on an annual basis by the amount of money expended on work performed by CRRM and CRT during the previous year pursuant to EPA/KDHE approved workplans. In the event that the estimated cost of completion of the RCRA corrective action at the refinery or terminal is greater than the remaining balance of "cash financial assurance," then CRRM and CRT shall establish financial assurance for the difference in conformance with the financial assurance mechanisms described within 40 C.F.R. §§ 265.142, 265.143, 265.144, and 265.145.

86. After two years after the Date of Closing, upon the request of CRRM and/or CRT, the parties shall review the financial assurance established pursuant to Paragraph 82 above, and

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determine whether another mechanism, or reduction in the amounts of "cash financial assurance", including consideration of a "trust fund", the "financial self test," or the "corporate guarantee" may be appropriate to establish financial assurance for the corrective action to be performed at the refinery and terminal. Any change in the mechanism establishing financial assurance pursuant to Paragraph 82 may only be made with the express written approval of and in a form acceptable to EPA. Any financial assurance shall be established in conformance with the financial assurance mechanisms described within 40 C.F.R. §§ 265.142, 265.143, 265.144, and 265.145.

87. CRRM and CRT are liable for corrective action and financial assurance under the provisions of this Section; however, the financial assurance for corrective action required by Paragraph 82 may be established and maintained by Farmland Industries, Inc. and/or its successors as defined by the (Bankruptcy Court) on behalf of CRRM and CRT. Any such financial assurance established by Farmland for the refinery and/or terminal shall satisfy CRRM and/or CRT's respective financial assurance obligations pursuant to Paragraphs 82.a. and 82.b. EPA will notify CRRM and CRT upon receipt of a document from or on behalf of Farmland Industries, Inc. that financial assurance in an amount and manner sufficient to satisfy the terms of this Section has been established.

88. CRRM agrees to timely submit a complete Part B application for the refinery and CRT agrees to timely submit a complete Part B application for the terminal, upon the request of EPA and/or KDHE and agree not to contest their legal obligation to timely submit a Part B application as defined by applicable law. In any action to enforce the terms of this Section or otherwise require the performance of RCRA corrective action to address on- or off-site contamination from the refinery and terminal pursuant to RCRA, CCRM and/or CRT agree not

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to contest EPA's and/or KDHE's jurisdiction and/or authority to bring such action; provided that CRRM and CRT reserve all rights and defenses, if any there be, to contest any substantive claims contained in such actions.

89. Within 60 days from the Date of Closing, CRRM (with respect to the refinery) and CRT (with respect to the terminal) shall submit to EPA workplans pursuant to EPA's letters to Farmland Industries, Inc. dated January 13, 2004, regarding additional work at the refinery and terminal.

90. CRRM and CRT shall submit all documents required to be submitted to EPA by Sections XII and XIII of this Consent Decree to:

John DeLashmit, P.E.
U.S. Environmental Protection Agency
Region VII (ARTD)
901 N. 5th Street
Kansas City, Kansas 66101

91. CRRM and CRT shall submit all documents required to be submitted to KDHE by Sections XII and XIII of this Consent Decree to:

Mostafa Kamal
Kansas Department of Health and Environment
Bureau of Waste Management
Curtis State Office Building
1000 SW Jackson, Suite 320
Topeka, Kansas, 66612

92. As used in this Consent Decree, the term "off-site RCRA corrective action" shall mean RCRA corrective action required to address contamination released on or at the refinery or the terminal that has migrated past the boundaries as defined in maps attached hereto as Appendix 5.

XIV. RECORDKEEPING, RECORD RETENTION AND REPORTING

93. For the purposes of this Consent Decree, any requirement for CRRM and/or CRT

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to consult, obtain approval of or submit any type of information to EPA or the United States, including reports, analyses, or data, shall be construed as imposing identical requirements from CRRM and/or CRT to KDHE.

94. CRRM and CRT shall retain all records required to be maintained in accordance with this Consent Decree for a minimum period of five (5) years after termination of this Consent Decree, unless other regulations require the records to be maintained longer.

95. With the exception of the Semi-Annual Progress Reports, all notices, reports or any other written or electronic submissions from CRRM and CRT shall be certified as set forth below. Certification may be by the refinery and/or terminal manager, as applicable, or his/her designee, as provided in writing by the refinery/terminal manager, provided the designee is a company employee responsible for environmental management and compliance.

> "I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and that I have made a diligent inquiry of those individuals immediately responsible for obtaining the information and that to the best of my knowledge and belief, the information submitted herewith is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

96. Beginning with the period ending December 31, 2004, and for every six (6) calendar month period thereafter, CRRM and/or CRT, as applicable, each shall submit a calendar Semi-annual Progress Report ("calendar semi-annual progress report") to EPA within thirty (30) days after the end of each six (6)-month period during the life of the Consent Decree. In addition to any other information specifically required to be submitted in compliance with other Sections of the Consent Decree, this report shall contain the following:

A. Progress report on the implementation of the requirements of Sections IV through XI of this Consent Decree for the calendar six (6)-month period;

B. A summary of the emissions data as required by Sections IV through XI of this Consent Decree for the calendar six (6)-month period;

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C. A description of any problems anticipated with respect to meeting any of the requirements of this Consent Decree; and

D. Any such additional matters as CRRM and/or CRT, as applicable, believe should be brought to the attention of the United States or KDHE.

97. The calendar Semi-Annual Progress Reports shall be certified by the refinery/terminal manager or company official responsible for environmental management and compliance, as follows:

> "I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete."

XV. STIPULATED PENALTIES

A. In General

98. CRRM and CRT shall be liable for stipulated penalties for failure to comply with the terms of this Consent Decree, as provided herein. For purposes of this Section, compliance shall mean timely and complete performance in accordance with the Decree and any Appendices.

99. All stipulated penalties shall begin to accrue on the day after complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the violation or completion of the activity. Separate stipulated penalties for separate violations of this Decree may accrue simultaneously. All stipulated penalties owed to the United States and the State of Kansas under this Decree shall be due and payable within thirty (30) days of CRRM's and/or CRT's receipt of a written demand for payment, unless CRRM and/or CRT invoke the procedures set forth in Section XVIII, Dispute Resolution.

100. CRRM and CRT shall pay stipulated penalties to the United States and the State of Kansas (split 50% to each), for each failure by CRRM and/or CRT to comply with the terms

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of this Consent Decree; provided, however, that the United States or the State of Kansas may elect to bring an action for contempt in lieu of seeking stipulated penalties for violations of this Consent Decree. Payment of all stipulated penalties shall be made in accordance with the procedures set forth in this Section.

101. The payment of any stipulated penalty shall not affect CRRM's and/or CRT's respective obligations to comply with the provisions of this Decree.

B. Accrual of Stipulated Penalties

102. Stipulated penalties shall be calculated in the amounts specified in Paragraphs 103 through 112. Stipulated penalties under Paragraphs 103(C), and 104(C) shall not start to accrue until there is noncompliance with the concentration based, rolling average emission limits identified in the Sections IV and V for 5% or more of the applicable unit's operating time during any calendar quarter. Stipulated penalties under Paragraph 106(A) shall not start to accrue until there is noncompliance with the CEM's operating requirement for 5% or more of the monitor's operating time during any calendar quarter.

103. Section IV - Requirements for NOx Emission Reductions from FCCU.

A. For failure to install approved control equipment by December 31, 2010:

Period of Delay	Penalty per day
1st through 30th day after deadline	$940
31st through 60th day after deadline	$2,250
Beyond 60th day after deadline	$3,750 or, an amount equal or greater to 1.2 times the economic benefit of delayed compliance, whichever is greater.

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(B) For failure to use NOx reducing catalyst additives:

Period of Delay	Penalty per day
1st through 30th day	$560
31st through 60th day	$1,120
Beyond 60th day	$2,250

(C) For each failure to meet any emissions limit proposed by CRRM or established by EPA (final or interim) for NOx per day, per unit: $560 for each calendar day in a calendar quarter on which the short-term rolling average exceeds the applicable limit; and $1,875 for each calendar day in a calendar quarter on which the specified 365-day rolling average exceeds the applicable limit.

(D) For failure to meet a deadline in project schedule.

Period of Delay	Penalty per day
1st through 30th day after deadline	$320
31st through 60th day after deadline	$640
Beyond 60th day after deadline	$1,250 or, an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater.

104. Section V - Requirements for SO2 Emission Reductions from FCCU.

(A) For failure to install a wet gas scrubber at the Refinery by December 31, 2010:

Period of Delay	Penalty per day
1st through 30th day after deadline	$940

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31st through 60th day after deadline	$2,250
Beyond 60th day after deadline	$3,750, or an amount equal to 1.2 times the economic benefit of the delayed compliance whichever is greater

(B) For failure to use SO2 reducing Catalyst Additives per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$560
31st through 60th day after deadline	$1,120
Beyond 60th day after deadline	$2,250 or, for either, an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater.

(C) For each failure to meet SO2 emission limits established for the FCCU and/or each failure to meet SO2 emission limits proposed by CRRM or established by EPA (final or interim) per day, per unit: $1125 for each calendar day in a calendar quarter on which the specified 7-day rolling average exceeds the applicable limit; $2,250 for each calendar day in a calendar quarter on which the specified 365 day rolling average exceeds the applicable limit.

(D) For failure to meet a deadline in project schedule:

Period of Delay	Penalty per day
1st through 30th day after deadline	$320
31st through 60th day after deadline	$640

Beyond 60th day	$1,250

105. Section VI - Requirements for PM Emissions Reductions from FCCU.

(A) For failure to meet the PM emission limit:

Period of Delay	Penalty per day
1st through 30th day after deadline	$340
31st through 60th day after deadline	$680
Beyond 60th day	$1,350

(B) For failure to conduct stack test, per unit, per day $125

106. Section VII - Requirements for CEMs.

(A) For failure to operate CEMs, per unit, per day:

Period of Delay	Penalty per day
1st through 30th day after deadline	$375
31st through 60th day after deadline	$750
Beyond 60th day after deadline	$1,500, or, an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater.

(B) For failure to conduct RAA or RATA on each CEMs.

Period of Delay	Penalty per day
1st through 30th day after deadline	$190
31st through 60th day after deadline	$375
Beyond 60th day after deadline	$750

(C) For failure to conduct CGA on each CEMs, per unit:

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Period of Delay	Penalty per day
1st through 30th day after deadline	$50
31st through 60th day after deadline	$100
Beyond 60th day after deadline	$200 or, for either, an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater.

107. Section VIII -- Requirements for Benzene Waste NESHAP Program Enhancements. For each violation in which a frequency is specified in Paragraph 51, the amounts identified below shall apply on the first day of violation, shall be calculated for each incremental period of violation (or portion thereof), and shall be doubled beginning on the fourth consecutive, continuing period of violation. For requirements where no frequency is specified, penalties will not be doubled.

A. For failure to complete the BWN Compliance Review and Verification Reports as required by Paragraph 51.C, $3,750 per month.

B. For failure to implement the actions necessary to correct non-compliance as required by Paragraph 51.D:

Period of Delay	Penalty per day
1st through 30th day after deadline	$625
31st through 60th day after deadline	$1,500
Beyond 60th day	$2,500, or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is

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greater

C. If TAB equals or exceeds 1 Mg/yr, for failure to implement the training requirements of Paragraph 51.G, $5,000 per quarter.

D. For failure to submit or maintain any records or materials required by Paragraph 51.H of this Consent Decree, $1,000 per record or submission.

E. If TAB equals or exceeds 10 Mg/yr, for failure to install controls on waste management units handling organic wastes as required by Paragraph 51.H.ii, $5,000 per month per waste management unit.

F. If TAB equals or exceeds 1 Mg/yr, for failure to conduct sampling in accordance with the sampling plans required by Paragraphs 51.I (10 Mg/yr or more) or 51.J (1 Mg/yr or more), as applicable: $250 per week, per stream, or $15,000 per quarter, per stream, whichever is greater, but not to exceed $75,000 per quarter.

G. If TAB equals or exceeds 1 Mg/yr, for failure to submit the plan or retain the third-party contractor required by Paragraphs 51.I.viii (10 Mg/yr or more), 51.J.v (1 Mg/yr or more), or 51.J.vi (1 Mg/yr or more), $5,000 per month.

H. If TAB equals or exceeds 10 Mg/yr), for failure to comply with the miscellaneous compliance measures set forth in Paragraph 51.K.ii, as follows:

For 51.K.ii.a, monthly visual inspections: $250 per drain not inspected;

For 51.K.ii.b, weekly monitoring of vents: $250 per vent not monitored;

I. If TAB equals or exceeds 1 Mg/yr, for failure to identify/mark segregated

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stormwater drains as required in Paragraph 51.K.ii:c $500 per week per drain;

J. For failure to submit the written deliverables required by Paragraph 51.M: $500 per week, per report.

K. If it is determined through federal, state, or local investigation that the refinery has failed to include all benzene containing waste streams in its TAB calculation submitted pursuant to Paragraphs 51.C., CRRM shall pay the following:

Waste Stream	Penalty
for waste streams < 0.03 Mg/yr	$125
for waste streams between 0.03 and 0.1 Mg/yr	$500
for waste streams between 0.1 and 0.5 Mg/yr	$2,500
for waste streams > 0.5 Mg/yr	$5,000

108. Section IX– Requirements for Sulfur Recovery Plant.

A. For failure to control sour water stripper stream:

Period of Non-Compliance	Penalty per day
1st through 30th day	$750
31st through 60th day	$1,300
Beyond 60th day	$3,000 or an amount equal to 1.2 times the amount of delayed compliance whichever is greater.

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109. Section X – Requirements for Other Emission Controls.

A. For failure to meet emissions limits, operating and monitoring requirements:

Period of Non-Compliance	Penalty per day
1st through 30th day	$750
31st through 60th day	$1,300
Beyond 60th day	$3,000 or an amount equal to 1.2 times the amount of delayed compliance whichever is greater.

B. For failure to install rupture disks by the dates specified, per rupture disk:

Period of Delay	Penalty per day
1st through 30th day after deadline	$560
31st through 60th day after deadline	$1,120
Beyond 60th day after deadline	$2,250, or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater.

C. For failure to conduct initial performance test (if applicable), by the dates specified, per unit:

Period of Delay	Penalty per day
1st through 30th day after deadline	$125
31st through 60th day after deadline	$250

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Beyond 60th day after deadline	$500, or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater.

110. Section XII - RCRA Closure/Post Closure

A. For failure to submit permit applications:

Period of Non-Compliance	Penalty per day
1st through 30th day	$600
31st through 60th day	$1,200
Over 60 days	2,250 or an amount equal to 1.2 times the economic benefit of delayed compliance, whichever is greater.

111. Section XIII – RCRA Corrective Action

A. For failure to execute amendment to AOC

Period of Delay	Penalty per day
1st through 30th day	$150
Beyond 30th day	$375

B. For failure to post financial assurance

Period of Delay	Penalty per day
1st through 30th day	$750
Beyond 30th day	$1300

112. General Provisions

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A. For failure to prepare and/or submit written deliverables required by this Consent Decree:

Period of Delay	Penalty per day
1st through 30th day after deadline	$150
31st through 60th day after deadline	$375
Beyond 60th day after deadline	$750

B. For each failure to submit a permit application as required by this Consent Decree:

Period of Delay	Penalty per day
Days 1-30	$600
Days 31-60	$1200
Over 60 Days	$2,250

113. Payment

A. Payment of any stipulated penalty pursuant to this Consent Decree due the United States shall be by Electronic Funds Transfer ("EFT") to the United States Department of Justice, in accordance with current EFT procedures, referencing the USAO File Number _____, DOJ Case Number _____, and the civil action case name and case number of the District of Kansas. Any costs of such EFT shall be the responsibility of CRRM or CRT, as applicable. Payment shall be made in accordance with specific instructions provided to CRRM and/or CRT by the Financial Litigation Unit of the U.S. Attorney's Office for the District of Kansas. Any funds received after 11:00 a.m. (EST) shall be credited on the next business day. CRRM and/or CRT, as applicable, shall send notice that such payment has been made to the United States as specified in

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Paragraph 145.

B. Payment of any penalty pursuant to this Consent Decree due the State of Kansas shall be by check payable to the Kansas Department of Health and Environment and addressed as follows:

Roderick L. Bremby, Secretary
Kansas Department of Health and Environment
Charles Curtis State Office Building
1000 S.W. Jackson, Suite 560
Topeka, Kansas 66612-1368.

C. If CRRM and/or CRT, as applicable, fail to timely and fully make any payment required under this Decree, CRRM or CRT, as applicable, shall be liable for interest on the unpaid balance at the rate established pursuant to 28 U.S.C. § 1961(a), i.e. a rate equal to the coupon issue yield equivalent (as determined by the Secretary of Treasury) of the average accepted auction price for the last auction of 52-week U.S. Treasury bills settled prior to the Date of Lodging of the Consent Decree. Interest shall be computed daily and compounded annually. Interest shall be calculated from the date payment is due under the Consent Decree through the date of actual payment. In addition, CRRM and/or CRT, as applicable, shall be liable for any costs of enforcement and collection pursuant to the Federal Debt Collection Procedure Act, 28 U.S.C. § 3001 et seq.

D. All monies payable under this decree are penalties within the meaning of Section 162(f) of the Internal Revenue Code, 26 U.S.C. § 162(f), and therefore are not tax deductible for purposes of federal, state, or local law.

E. Upon the Date of Entry of this Consent Decree, the Consent Decree shall constitute an enforceable judgment for purposes of post-judgment collection in accordance with the Federal Rules of Civil Procedure, the Federal Debt Collection

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Procedure Act, 28 U.S.C. §§ 3001-3308, and all other applicable federal authority. The United States shall be deemed a judgment creditor for purposes of collecting any unpaid amounts of stipulated penalties and interest.

XVI. RIGHT OF ENTRY

114. Any authorized representative of EPA or KDHE, including contractors and grantees, shall have a right of entry upon the premises of the refinery and the terminal at any reasonable time for the purpose of monitoring compliance with the provisions of this Consent Decree, including inspecting plant equipment, and inspecting and copying all records maintained by CRRM and/or CRT required by this Consent Decree. Nothing in this Consent Decree shall limit the authority of EPA and KDHE to conduct tests and inspections under Section 114 of the Act, 42 U.S.C. § 7414, or any other statutory and regulatory provision.

XVII. FORCE MAJEURE

115. If any event occurs which causes or may cause a delay or impediment to performance in complying with any provision of this Consent Decree, CRRM (for the refinery) and/or CRT (for the terminal) shall notify the United States and KDHE in writing as soon as practicable, but in any event within twenty (20) business days of the date when CRRM or CRT, as applicable, first knew of the event or should have known of the event by the exercise of due diligence. In this notice, CRRM or CRT, as applicable, shall claim a force majeure by specifically referencing this Paragraph and describing the event, the anticipated length of time the delay may persist, the cause or causes of the delay, and the measures taken or to be taken by CRRM or CRT, as applicable to prevent or minimize the delay and the schedule by which those measures will be implemented. CRRM or CRT, as applicable, shall adopt all reasonable measures to avoid or minimize such delays.

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116. Failure by CRRM or CRT to substantially comply with the notice requirements of this Section as specified above shall render this Section voidable by the United States and KDHE as to the specific event for which CRRM or CRT, as applicable, have failed to comply with such notice requirement, and, if voided, it shall be of no effect as to the particular event involved.

117. If the United States and KDHE agree that the delay or impediment to performance has been or will be caused by circumstances beyond the control of CRRM or CRT, as applicable, including any entity controlled by them, and that they could not have prevented the delay by the exercise of due diligence, the parties shall stipulate to an extension of the required deadline(s) for all requirement(s) affected by the delay by a period equivalent to the delay actually caused by such circumstances, or such other period as may be appropriate in light of the circumstances. Such stipulation may be filed as a modification to this Consent Decree by agreement of the parties pursuant to the modification procedures established in this Consent Decree. CRRM or CRT, as applicable, shall not be liable for stipulated penalties for the period of any such delay.

118. If the United States or KDHE deny CRRM or CRT's, as applicable, claim that a delay or impediment to performance has been or will be caused by circumstances beyond the control of CRRM or CRT, as applicable, including any entity controlled by them, and that they could not have prevented the delay by the exercise of due diligence, the United States' and/or KDHE's position shall control unless CRRM or CRT, as applicable, invoke the procedures set forth in Section XVII, Dispute Resolution within ten (10) days of the receipt of such denial. CRRM or CRT, as applicable, shall have the burden of proving that any event is caused solely by circumstances beyond their reasonable control and that they exercised best efforts to comply with its obligation under the Decree.

119. Unanticipated or increased costs or expenses associated with the performance of

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CRRM's and CRT's obligations under this Consent Decree shall not constitute a force majeure event.

XVIII. DISPUTE RESOLUTION

120. The dispute resolution procedures set forth in this Section shall be available to resolve all disputes arising under this Consent Decree.

121. The dispute resolution procedures required herein shall be invoked upon the giving of written notice by one of the Parties to this Consent Decree to another advising of a dispute pursuant to this Section. The notice shall describe the nature of the dispute, and shall state the noticing Party's position with regard to such dispute. The Party receiving such a notice shall acknowledge receipt of the notice and the Parties shall expeditiously schedule a meeting to discuss the dispute informally. Such period of informal negotiations shall not extend beyond thirty (30) calendar days from the date of receipt of the notice invoking dispute resolution, unless it is agreed by the Parties that this period should be extended.

122. In the event that the Parties are unable to reach agreement during the informal negotiation period, the United States and KDHE shall provide CRRM or CRT, as applicable, with a written summary of their position regarding the dispute. The position advanced by the United States and KDHE shall be considered binding unless within forty-five (45) calendar days of CRRM's or CRT's, as applicable, receipt of the written summary of the United States' and KDHE's position CRRM or CRT, as applicable, file with the Court a petition which describes the nature of the dispute. The United States and KDHE shall respond to the petition within forty-five (45) calendar days of filing.

123. In the event that the United States and KDHE make differing determinations or take differing actions that affect CRRM's or CRT's, as applicable, rights or obligations under

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this Consent Decree, the final decisions of the United States shall take precedence.

124. Where the nature of the dispute is such that a more timely resolution of the issue is required, the time periods set forth in this Section may be shortened upon motion of one of the Parties to the dispute.

125. The Parties do not intend that the invocation of this Section by a Party cause the Court to draw any inferences nor establish any presumptions adverse to either Party as a result of invocation of this Section.

126. As part of the resolution of any dispute submitted to dispute resolution, the Parties, by agreement, or this Court, by Order, may, in appropriate circumstances, extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of dispute resolution. CRRM or CRT, as applicable, shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule.

XIX. EFFECT OF SETTLEMENT

127. In consideration of performance of the injunctive relief set forth herein, the effect of this settlement will be to fully resolve CRRM's and CRT's civil liability to the United States and the State of Kansas through the Date of Lodging this Consent Decree as set forth in this Section.

128. For purposes of this Section, "Applicable NSR/PSD Requirements" shall mean:

A. PSD requirements at Part C of Subchapter I of the Act, 42 U.S.C. § 7475, and the regulations promulgated thereunder at 40 C.F.R. § 52.21;

B. "Plan Requirements for Non-Attainment Areas" at Part D of Subchapter I of the Act, 42 U.S.C. §§ 7502-7503, and the regulations promulgated

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thereunder at 40 C.F.R. §§ 51.165 (a) and (b); Title 40, Part 51, Appendix S; and 40 C.F.R. § 52.24; and

C. Any applicable state regulations that implement, adopt, or incorporate the specific federal regulatory requirements identified above.

129. The effect of this settlement will be to fully resolve: 1) CRRM's civil liability to the United States and the State of Kansas through the Date of Lodging this Consent Decree for the violations alleged in the Complaint filed simultaneously with the Lodging of this Consent Decree, which will include, at a minimum, all allegations set forth in the Notice of Violation issued to Farmland Industries, Inc. by EPA on or about January 17, 2002; 2) CRRM's civil penalty liability to State of Kansas related to any impermissible impact on air quality (NAAQS), provided CRRM takes steps within 180 days (or other period of time approved in writing by KDHE) of the completion of modeling and increment consumption analysis to abate the impermissible impact on air quality; 3) CRRM's civil liability to the United States and the State of Kansas for the operation of the refinery without required permits, permit applications and/or authorizations prior to the transfer to CRRM of existing valid permits, permit applications, and/or authorizations to operate issued to Farmland Industries, Inc. prior to the Date of Closing, and 4) CRT's civil liability to the United States and the State of Kansas for the operation of the terminal without required permits, permit applications and/or authorizations prior to the transfer to CRT of existing valid permits, permit applications, and/or authorizations to operate issued to Farmland Industries, Inc. prior to the Date of Closing.

130. With respect to emissions of the following pollutants from the following units, entry of this Consent Decree shall resolve all civil liability of the refinery to the United States and the State of Kansas as follows:

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A. for violations of the Applicable NSR/PSD Requirements at the FCCU for SO2, NOx, PM and PM10 resulting from construction or modification that occurred prior to the Date of Lodging of the Consent Decree. This release shall continue for each pollutant until installation of the control equipment required for that pollutant, or until December 31, 2010, whichever is earlier;

B. for violations of the Applicable NSR/PSD Requirements at the No. 2 Crude Unit Heater for NOx resulting from construction or modification that occurred prior to the Date of Lodging of the Consent Decree. This release shall continue until incorporation of the emission limit required by Paragraph 54 into a federally enforceable permit;

C. for violations of the Applicable NSR/PSD Requirements at the No. 3 Vacuum Unit Heater for NOx resulting from construction or modification that occurred prior to the Date of Lodging of the Consent Decree. This release shall continue until incorporation of the emission limit required by Paragraph 54 into a federally enforceable permit;

D. for violations of the Applicable NSR/PSD Requirements at the RADCO Crude Heater for NOx resulting from construction or modification that occurred prior to the Date of Lodging of the Consent Decree. This release shall continue until incorporation of the final emission limit required by Paragraph 57 into a federally enforceable permit;

E. for violations of the monitoring requirements of NSPS Subpart J for fuel gas combustion devices, specifically 40 C.F.R. Part 60.105(a), for the flare

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on the API Separator Off-Gas Scrubber. This release shall continue until ninety (90) days after EPA's final determination of the approvability of the pending request for an alternative monitoring plan.

F. For violations of the requirements of the Benzene Waste NESHAP, more specifically 40 C.F.R. Part 61, Subpart FF and any applicable state regulations that implement, adopt, or incorporate the Benzene Waste NESHAP requirements, that occurred prior to the Date of Entry of the Consent Decree and that are identified by CRRM pursuant to Paragraphs 51.C and 51.D. This release shall continue until CRRM completes all actions required pursuant to Paragraph 51.D.

131. Notwithstanding the resolution of liability in Paragraph 129, the release of liability by the United States and KDHE to CRRM for violations of the Applicable NSR/PSD Requirements during the period between the Date of Lodging of the Consent Decree and any applicable post-lodging compliance dates shall be rendered void if CRRM materially fails to comply with the respective obligations and requirements of Sections IV, V, VI, VII and X, provided however, that the release in this Section shall not be rendered void if CRRM remedies such material failure and pays any stipulated penalties due as a result of such material failure.

132. Notwithstanding the resolution of liability in Paragraph 129, the release of liability by the United States and KDHE to CRRM for violations of NSPS Subpart J for fuel gas combustion devices, specifically 40 C.F.R. Part 60.105(a), during the period between the Date of Lodging of the Consent Decree and any applicable post-lodging compliance dates shall be rendered void if CRRM materially fails to comply with the obligations and requirements of Paragraphs 60 and 61, provided however, that the release in these Paragraphs shall not be

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rendered void if CRRM remedies such material failure and pays any stipulated penalties due as a result of such material failure.

133. The United States and the State of Kansas retain all authority and reserve all rights to take any and all actions otherwise authorized by law. Nothing in this Consent Decree shall be construed to bar, alter, or limit the ability of the United States and the State of Kansas to pursue, and the United States and the State of Kansas expressly reserve their rights to pursue, any legal or equitable, civil or criminal, judicial or administrative relief to remedy future violations after the Date of Lodging of the Consent Decree of any statute, law, or regulation; violations of the terms of this Consent Decree; or violations of any statute, law, or regulation except those violations expressly set forth in the Complaint. The United States' and the State of Kansas' covenant not to sue does not extend to any matters other than those expressly specified herein. The United States and the State of Kansas reserve, and this Consent Decree is without prejudice to, all rights against CRRM or CRT with respect to all matters other than those expressly specified herein.

134. In any subsequent administrative or judicial proceeding initiated by the United States or the State of Kansas for civil penalties or injunctive relief, CRRM and CRT shall not assert and may not maintain any defense or claim based upon the principles of waiver, res judicata, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised by the United States or the State of Kansas in the subsequent proceeding should have been brought in the instant case.

135. [INTENTIONALLY LEFT BLANK]

136. Notwithstanding any other provision of this Consent Decree, the United States and the State of Kansas retain all authority and reserve all rights to take any and all response

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actions authorized by law, including actions against any person, including CRRM and CRT, to abate or correct conditions which may present an imminent and substantial endangerment to the public health, welfare, or the environment.

XX. GENERAL PROVISIONS

137. Retention of Jurisdiction. This Court shall retain jurisdiction of this matter for the purposes of implementing and enforcing the terms and conditions of this Consent Decree and for the purpose of adjudicating all disputes among the Parties that may arise under the provisions of this Consent Decree, until the Consent Decree terminates in accordance with Section 148.

138. Other Laws. Except as specifically provided by this Consent Decree, nothing in this Consent Decree shall relieve CRRM or CRT of their respective obligations to comply with all applicable federal, state and local laws and regulations. Nothing in this Consent Decree shall be construed to prevent or limit the rights of the United States or the State of Kansas to seek or obtain other remedies or sanctions available under other federal, state or local statutes or regulations, by virtue of CRRM's or CRT's violation of this Consent Decree or of the statutes and regulations upon which the Consent Decree is based, or for CRRM's or CRT's violations of any applicable provisions of law, other than the specific matters resolved herein. This shall include the right of the United States and the State of Kansas to invoke the authority of the Court to order CRRM's or CRT's compliance with this Consent Decree in a subsequent contempt action.

139. Effect of Compliance. The United States and KDHE do not, by their consent to the entry of this Consent Decree, warrant or aver in any manner that CRRM's or CRT's complete compliance with this Consent Decree will result in compliance with the provisions of the CAA, RCRA, the Kansas Clean Air Act, or the Kansas counterpart. Notwithstanding the

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review or approval by EPA or KDHE of any plans, reports, policies or procedures formulated pursuant to the Consent Decree, CRRM (for the refinery) and CRT (for the terminal) shall remain solely responsible for compliance with the terms of this Consent Decree, all applicable permits, and all applicable federal, state and local laws and regulations.

140. Service of Process. CRRM and CRT hereby agree to accept service of process by mail with respect to all matters arising under or relating to this Consent Decree and to waive the formal service requirements set forth in Rule 4 of the Federal Rules of Civil Procedure and any applicable local rules of this Court, including but not limited to, service of a summons. The persons identified by CRRM and CRT, respectively, at Paragraph 145 are authorized to accept service of process with respect to all matters arising under or relating to this Consent Decree.

141. Post-Lodging/Pre-Entry Obligations. Obligations of CRRM of CRT under Consent Decree to perform duties scheduled to occur after the Date of Lodging of this Consent Decree, but prior to the Date of Entry of this Consent Decree, shall be legally enforceable on and after the Date of Entry of this Consent Decree. Liability for stipulated penalties, if applicable, shall accrue for violation of such obligations and payment of such stipulated penalties may be demanded by the United States and KDHE as provided in this Consent Decree, provided that stipulated penalties that may have accrued between the Date of Lodging of this Consent Decree and the Date of Entry of this Consent Decree may not be collected unless and until this Consent Decree is entered by the Court.

142. Costs. Each party to this action shall bear its own costs and attorneys' fees.

143. Public Documents. All information and documents submitted by CRRM or CRT to the United States and KDHE pursuant to this Consent Decree shall be subject to public inspection in accordance with the respective statutes and regulations that are applicable to EPA

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and KDHE, unless subject to legal privileges or protection or identified and supported as business confidential in accordance with the respective state or federal statues or regulations.

144. Public Notice and Comment. The Parties agree to this Consent Decree and agree that the Consent Decree may be entered upon compliance with the public notice procedures set forth at 28 U.S.C. § 50.7, and upon notice to this Court from the United States Department of Justice requesting entry of the Consent Decree. The United States and KDHE reserve their rights to withdraw or withhold consent to the Consent Decree if public comments disclose facts or considerations indicating that the Consent Decree is inappropriate, improper, or inadequate.

145. Notice. Unless otherwise provided herein, notifications to or communications between the Parties shall be deemed submitted on the date they are postmarked and sent by U.S. Mail, postage pre-paid, except for notices under Section XVII (Force Majeure) and Section XVIII. (Dispute Resolution), which shall be sent by overnight mail or by certified or registered mail, return receipt requested. Except as otherwise specifically provided herein, all reports, notifications, certifications, or other communications required or allowed under this Consent Decree to be submitted or delivered to the United States, EPA, KDHE, and CRRM and CRT shall be addressed as follows:

As to the United States:

Chief
Environmental Enforcement Section
Environmental and Natural Resources Division
U.S. Department of Justice
P.O. Box 7611, Ben Franklin Station
Washington, D.C. 20044-7611
Reference Case No. _____

As to EPA, HQ
Director, Air Enforcement Division
Office of Regulatory Enforcement
U.S. Environmental Protection Agency

11/16/04

Mail Code 22452-A
1200 Pennsylvania Avenue, NW
Washington, DC 20460-0001

As to EPA, Region VII:

Chief
Air Planning and Compliance Branch
U.S. Environmental Protection Agency, Region 7
901 N. 5th Street
Kansas City, Kansas 66101

As to the State of Kansas:

Chief
Bureau of Air and Radiation
Kansas Department of Health and Environment
1000 S.W. Jackson, Suite 310
Topeka, Kansas 66612-1366

As to CRRM and CRT:

Keith D. Osborn
PO Box 570
400 N. Linden
Coffeyville, Kansas 67337

Philip L. Rinaldi
Chief Executive Officer
PO Box 1566
Coffeyville, Kansas 67337

Any party may change either the notice recipient or the address for providing notices to it by serving all other parties with a notice setting forth such new recipient or address. In addition, the nature and frequency of reports required by the Consent Decree may be modified by mutual written consent of the Parties.

146. Paperwork Reduction Act. The information required to be maintained or submitted pursuant to this Consent Decree is not subject to the Paperwork Reduction Act of 1980, 44 U.S.C. §§ 3501 et seq.

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147. Modification. This Consent Decree contains the entire agreement of the Parties and shall not be modified by any prior oral or written agreement, representation or understanding. Prior drafts of the Consent Decree shall not be used in any action involving the interpretation or enforcement of this Consent Decree. Non-material modifications to this Consent Decree shall be in writing, signed by the Parties, but need not be filed with the Court. Material modifications to this Consent Decree shall be in writing, signed by the Parties, and shall be effective upon filing with the Court. Specific provisions in this Consent Decree that govern specific types of modifications shall be effective as set forth in the specific provisions governing the modification.

XXI. TERMINATION

148. This Consent Decree shall be subject to termination upon motion by the United States or CRRM and CRT after CRRM and CRT satisfy all requirements of this Consent Decree. The requirements for termination include payment of all penalties that may be due to the United States or the State of Kansas under this Consent Decree, installation of control technology systems as specified herein and the performance of all other Consent Decree requirements, and EPA's receipt of the first calendar semi-annual progress report following the conclusion of CRRM's obligations under this Consent Decree. At such time, if CRRM and CRT believe that they have fulfilled the obligations of this Consent Decree and have paid any stipulated penalties required by this Consent Decree, then CRRM or CRT shall so certify to the United States and unless the United States objects in writing with specific reasons within one hundred twenty (120) days of receipt of the certification, the Court shall order that this Consent Decree be terminated on CRRM and CRT's motion.

XXII. SIGNATORIES

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149. Each of the undersigned representatives certify that he or she is fully authorized to enter into the Consent Decree on behalf of such Parties, and to execute and to bind such Parties to the Consent Decree.

Dated and entered this _____ day of _____, ____.

_____
UNITED STATES DISTRICT COURT JUDGE

MM 11/14

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States of America v. CRRM and Marketing, LLC et al.

FOR THE UNITED STATES OF AMERICA

FOR THE U.S. DEPARTMENT OF JUSTICE

Date: 2.17.04

THOMAS L. SANSONETTI
Assistant Attorney General
U.S. Department of Justice
Environmental and Natural Resources Division
Washington, D.C. 20044

Date: 2/17/04

ROBERT MAHER
ASSISTANT SECTION CHIEF
U.S. Department of Justice
Environmental and Natural Resources Division
Washington, D.C. 20044

Date: _____

JAMES E. FLORY
United States Attorney
District of Kansas

Date: _____

EMILY METZGER
Assistant U.S. Attorney
Kansas State Bar No.
500 State Avenue, Suite 360
Kansas City, Kansas 66101

THE UNDERSIGNED PARTIES enter into this Consent Decree in the matter of United States of America v. CRRM and Marketing, LLC et al.

FOR THE UNITED STATES OF AMERICA

FOR THE U.S. DEPARTMENT OF JUSTICE

Date: _____

THOMAS L. SANSONETTI
Assistant Attorney General
U.S. Department of Justice
Environmental and Natural Resources Division
Washington, D.C. 20044

Date: _____

ROBERT MAHER
ASSISTANT SECTION CHIEF
U.S. Department of Justice
Environmental and Natural Resources Division
Washington, D.C. 20044

Date: 2/24/03

ERIC F. MELGREN
United States Attorney
District of Kansas

Date: 2/25/04

EMILY METZGER
Assistant U.S. Attorney
KS Supreme Ct. No. 10750
1200 Epic Center; 301 N. Main
Wichita, KS 67202

FOR THE U.S. EPA

Date: FEB 10 2004

PHYLLIS P. HARRIS
Acting Assistant Administrator
U.S. Environmental Protection Agency
Office of Enforcement and Compliance Assurance

Date: 2/7/2004

JAMES B. GULLIFORD
Regional Administrator
U.S. Environmental Protection Agency
Region VII
Kansas City, Kansas

Date: 2/7/2004

for MARTHA R. STEINCAMP
Regional Counsel
U.S. Environmental Protection Agency
Region VII
901 N. 5th Street
Kansas City, Kansas 66101

Date: 2/7/2004

BECKY INGRUM DOLPH
Deputy Regional Counsel
U.S. Environmental Protection Agency
Region VII
901 N. 5th Street
Kansas City, Kansas 66101

FOR THE STATE OF KANSAS

Date: 2-9-04

RODERICK L. BREMBY
Secretary
Kansas Department of Health and Environment
Charles Curtis State Office Building
1000 S.W. Jackson, Suite 560
Topeka, Kansas 66612

Date: February 9, 2004

YVONNE ANDERSON #12626 D.S.Sup.Ct.
Chief Legal Counsel
Kansas Department of Health and Environment
Charles Curtis State Office Building
1000 S.W. Jackson, Suite 560
Topeka, Kansas 66612

FOR DEFENDANT COFFEYVILLE

RESOURCES REFINING &

MARKETING, LLC

Date: 2/6/04

PHILLIP L. RINALDI
Chief Executive Officer

FOR DEFENDANT COFFEYVILLE

RESOURCES TERMINAL, LLC

Date: 2/6/04

PHILLIP L. RINALDI
Chief Executive Officer

2/6/04

ATTORNEY FOR DEFENDANT COFFEYVILLE RESOURCES REFINING & MARKETING, LLC and COFFEYVILLE RESOURCES TERMINAL, LLC

Date: 2/9/04

LEANN M. JOHNSON-KOCH
Piper Rudnick LLP
1200 Nineteenth Street, N.W.
Washington, DC 20036
(202) 861-6442

Appendix 1

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APPENDIX 1

DETERMINING THE OPTIMIZED ADDITION RATES OF CATALYST ADDITIVES AT THE FCCU

I. PURPOSE

This Appendix defines a process by which Coffeyville Refining & Marketing, LLC ("CRRM") shall determine for the FCCU, the Optimized Addition Rates for NO_x Reducing Catalyst Additives and SO_2 Reducing Catalyst Additives during the Optimization Periods.

II. ESTABLISHING AN OPTIMIZED NOx REDUCING CATALYST ADDITIVE ADDITION RATE

A. **Overview**. The Optimized NO_x Reducing Catalyst Additive Addition Rate shall be determined by evaluating NO_x emissions reductions and annualized costs at three different addition rates.

B. **The Increments.** The three addition rates or "increments" shall be:

1.0 Weight % NO_x Reducing Catalyst Additive
1.5 Weight % NO_x Reducing Catalyst Additive
2.0 Weight % NO_x Reducing Catalyst Additive

C. **The Procedure**. CRRM shall successively add NO_x Reducing Catalyst Additive at each increment set forth above. Once a steady state has been achieved at each increment, CRRM shall evaluate the performance of the NO_x Reducing Catalyst Additive in terms of NO_x emissions reductions and projected annualized costs. The final Optimized NO_x Reducing Catalyst Additive Addition Rate shall occur at the addition rate where either:

(1) the FCCU meets 20 ppm_{vd} NO_x (corrected to 0% O_2) on a 365-day rolling average, in which case CRRM shall agree to accept limits of 20 ppm_{vd} NO_x (corrected to 0% O_2) on a 365-day rolling average basis at the conclusion of the Demonstration Period; or

(2) the total annualized cost-effectiveness of the NO_x Reducing Catalyst Additive used exceeds $10,000 per ton of NO_x removed as measured from an uncontrolled baseline (as estimated based on current operating parameters as compared to

operating parameters during the NO_x baseline period); or

(3) the Incremental NO_x Reduction Factor is less than 1.8, where the Incremental NO_x Reduction Factor is defined as:

$$\frac{PR_i - PR_{i-1}}{CAR_i - CAR_{i-1}}$$ where:

PR_i = Pollutant (NO_x) reduction rate at increment i in pounds per day from the baseline model

PR_{i-1} = Pollutant (NO_x) reduction rate at the increment prior to increment i in pounds per day from the baseline model

CAR_i = Total Catalyst Additive Rate at increment i in pounds per day

CAR_{i-1} = Total Catalyst Additive Rate at the increment prior to increment i in pounds per day

If the conditions of either (1), (2) or (3) above are not met at any addition rate less than 2.0 weight % NO_x Reducing Catalyst Additive, then the Optimized Addition Rate shall be 2.0 weight % NO_x Reducing Catalyst Additive, except that if an additive limits the FCCU's ability to control CO emissions to below 500 ppmvd CO corrected to 0% O_2 on an 1-hour basis and cannot be reasonably compensated for by adjusting other parameters, then the additive rate shall be reduced to a level at which the additive no longer causes such effects.

III. ESTABLISHING AN OPTIMIZED SO_2 REDUCING CATALYST ADDITIVE ADDITION RATE

A. **Overview**. The Optimized SO_2 Reducing Catalyst Additive Addition Rate shall be determined by evaluating SO_2 emissions reductions at the following addition rates.

B. **The Increments.** The addition rates or "increments" shall be:

5.0 Weight % SO_2 Reducing Catalyst Additive
6.0 Weight % SO_2 Reducing Catalyst Additive
7.0 Weight % SO_2 Reducing Catalyst Additive
8.0 Weight % SO_2 Reducing Catalyst Additive
9.0 Weight % SO_2 Reducing Catalyst Additive

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10.0 Weight % SO_2 Reducing Catalyst Additive

C. **The Procedure**. CRRM shall successively add SO_2 Reducing Catalyst Additive at each increment set forth above. Once a steady state has been achieved at each increment, CRRM shall evaluate the performance of the SO_2 Reducing Catalyst Additive in terms of SO_2 emissions reductions. The final Optimized SO_2 Reducing Catalyst Additive Addition Rate shall occur at the addition rate where either:

(1) the FCCU meets 25 ppm_{vd} SO_2 (corrected to 0% O_2) on a 365-day rolling average and 50 ppm_{vd} SO_2 (corrected to 0% O_2) on a 7-day rolling average, in which case CRRM shall agree to accept limits of 25 ppm_{vd} SO_2 (corrected to 0% O_2) on a 365-day rolling average and 50 ppm_{vd} SO_2 (corrected to 0% O_2) on a 7-day rolling average at the conclusion of the Demonstration Period;

(2) the addition of SO_2 reducing catalyst additive limits the FCCU feedstock processing rate or conversion capability in a manner that cannot be reasonably compensated for by the adjustment of other parameters, the maximum addition rate shall be reduced to a level at which the additive no longer interferes with the FCCU processing or conversion rate; provided, however, that in no case, shall the maximum addition rate be less than 5.0 weight %; or

(3) the Incremental SO_2 Pick-up Factor is less than 2.0, where the Incremental SO_2 Pick-up Factor is defined as:

$$\frac{PR_i - PR_{i-1}}{CAR_i - CAR_{i-1}}$$ where:

PR_i = Pollutant (SO_2) reduction rate at increment i in pounds per day from the baseline model

PR_{i-1} = Pollutant (SO_2) reduction rate at the increment prior to increment i in pounds per day from the baseline model

CAR_i = Total Catalyst Additive Rate at increment i in pounds per day

CAR_{i-1} = Total Catalyst Additive Rate at the increment prior to increment i in pounds per day

If the conditions of either (1), (2), or (3) above are not met at any addition rate less than

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10.0 weight % SO_2 Reducing Catalyst Additive, then the Optimized Addition Rate shall be 10.0 weight % SO_2 Reducing Catalyst Additive. In no case shall the Optimized Addition Rate shall be less than 5.0 weight % SO_2 Reducing Catalyst Additive.

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Appendix 2

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61 GREEN = NSPS
35 RED = MACT

96 TOTAL

34	INSTALLED
62	REMAIN TO BE INSTALLED

PSV #	UNIT	VALVE LOCATION	Set PSIG	Quantity of Valves	Installed Date	Remaining in Unit
	AREA 1					
	#1 CRUDE UNIT					
513	CRUDE1	#1 TOWER OVERHEAD	30	1	Sprg 2002 TA	
519	CRUDE1	PREFLASH TOWER [T0086]	44	1	Sprg 2002 TA	
				2	2	0
588	VENT GAS	VENT GAS COMP. SUCTION DRUM	15	1	Sprg 2002 TA	
				1	1	0
	#2 CRUDE UNIT					
533	CRUDE2	V0324 DESALTER	150	1		
534	CRUDE2	V0323 OH RECEIVER	35	1		
535	CRUDE2	V0323 OH RECEIVER	40	1		
536	CRUDE2	T0103 CRUDE TOWER	50	1		
538	CRUDE2	V0325 FLASH DRUM	100	1		
539	CRUDE2	FR0042 KERO FILTER	200	1		
540	CRUDE2	FR0043 DIESEL FILTER	165	1		
				7	0	7
	REFORMER					
606	REFORMER	CHARGE PUMP DISCHARGE	540	1	Sprg 2002 TA	
607	REFORMER	SPLITTER OVERHEAD VAPOR	65	1		
610	REFORMER	SPLITTER OVERHEAD RECIEVER	65	1		
				3	1	2
	UNIFINER					
704	UNIFINER	STRIPPER TOWER	150	1		
				1	0	1
	HBON					
848	HBON	SPLITTER OH VAPOR	70	1		
850	HBON	SPLITTER OVERHEAD VAPOR	65	1		
851	HBON	SPLITTER RECEIVER	70	1		
860	HBON	SPLITTER OH VAPOR	68	1		
880	HBON	DEBUTANIZER OH VAPOR	310	1	Installed	
881	HBON	DEBUTANIZER OH VAPOR	325	1	Installed	
884	HBON	H-bon charge	548	1	Installed	
885	HBON	H-bon charge	548	1	Installed	
				8	4	4
	ISOM					
901	ISOM	STABILIZER VAPOR LINE	325	1		
902	ISOM	REACTOR EFFLUENT SEP (PV4)	250	1		
904	ISOM	ABSORBER FEED LINE	355	1		
905	ISOM	ABSORBER EFFLUENT REC V-11)	375	1		
920	ISOM	REFRIG SKID RELIEF VALVE #2	275	1		
921	ISOM	REFRIG SKID RELIEF VALVE #3	250	1		
922	ISOM	REFRIG SKID RELIEF VALVE #4	250	1		
924	ISOM	REFRIG SKID RELIEF VALVE #6	300	1		
925	ISOM	REFRIG SKID RELIEF VALVE #7	250	1		
926	ISOM	REFRIG SKID RELIEF VALVE #8	275	1		
927	ISOM	REFRIG SKID RELIEF VALVE #9	250	1		
928	ISOM	NORTH ABSORBER	350	1		
930	ISOM	NORTH CENTRAL ABSORBER	350	1		
929	ISOM	SOUTH CENTRAL ABSORBER	350	1		
931	ISOM	SOUTH ABSORBER	350	1		
				15	0	15
	LERU					
1100	LERU	INLET SEPERATOR		1		
1101	LERU	DETHANIZER REBOILER		1		
1102	LERU	INLET SEPERATOR VO484	400	1		
1103	LERU	PROPANE SURGE TANK		1		
1104	LERU	CHILLER 1311	220	1		
1105	LERU	COMPRESSOR DISCH. C0063	300	1		
1107	LERU	CHILLER E 1317		1		
1108	LERU	SUCTION SCRUBBER		1		
1109	LERU	WATER TRAP COMPRESSOR		1		
1110	LERU	OIL SEPERATOR		1		
1111	LERU	ECONOMIZER		1		
1112	LERU	SUCT. SCRUBBER V0502	125	1		
				12	0	12

	HDS					
1300	HDS	FEED SURGE DRUM	100	1		
1600	HDS	LOW PRESS SEP. (V0156)	150	1		
1620	HDS	STRIPPER TOWER	55	1		
1661	HDS	STRIPPER OVHD REC.	55	1		
1705	HDS	J COMP	130	1		
1745	HDS	K COMP	130	1		
1776	HDS	VENT GAS SEP.	150	1		
1800	HDS	FUEL GAS	115	1		
				8	0	8
	AREA 2 FCCU					
401	FCCU	FRACT. OH. TO FLARE	27	1	Sprg 2002 TA	
402	FCCU	FRACT. OH. TO FLARE	27	1	Sprg 2002 TA	
403	FCCU	FRACT. OH. TO FLARE	27	1	Sprg 2002 TA	
404	FCCU	FRACT. OH. TO FLARE	27	1	Sprg 2002 TA	
				4	4	0
	COKER					
101	COKER	FRACT OVHD LINE	45'	1	Sprg 2002 TA	
102	COKER	FRACT OVERHEAD REC.	48	1	Sprg 2002 TA	
103	COKER	STRIPPER TWR. BTM.	275	1	Sprg 2002 TA	
104	COKER	ABSORBER TOWER (BOT)	275	1	Sprg 2002 TA	
121	COKER	MEROX SAND FILTER	100	1		
122	COKER	MEROX OXIDIZER	55	1		
123	COKER	MEROX EXTRACTOR	100	1		
124	COKER	MEROX PRESCRUBBER	100	1		
125	COKER	MEROX DISULFIDE SEPERATOR	50	1		
126	COKER	MEROX CAUSTIC MIXER	100	1		
130	COKER	FRACT. OVERHEAD LINE	64	1	Sprg 2002 TA	
				11	5	6
	SOUTH ALKY FEED TREATER					
384	SOUTH ALKY FEED TREATER	FEED SURGE DRUM - VO463	180	1	Sprg 2002 TA	
385	SOUTH ALKY FEED TREATER	AMINE CONTACTOR - T0125	250	1	Sprg 2002 TA	
386	SOUTH ALKY FEED TREATER	AMINE KO DRUM - VO464	250	1	Sprg 2002 TA	
				3	3	0
	SAT GAS					
2001	SAT GAS	AMINE KNOCK OUT DRUM	250	1	Sprg 2003 TA	
2002	SAT GAS	AMINE WASH TOWER	250	1	Sprg 2003 TA	
2003	SAT GAS	DE-ETHANIZER SURGE DRUM	250	1	Sprg 2003 TA	
2004	SAT GAS	DE-ETHANIZER TOWER	490	1	Sprg 2003 TA	
2005	SAT GAS	DEPROPANIZER TOWER OVERHEAD	300	1	Sprg 2003 TA	
2007	SAT GAS	CAUSTIC SETTLER	250	1	Sprg 2003 TA	
2008	SAT GAS	WATER WASH	250	1	Sprg 2003 TA	
2009	SAT GAS	DE-EHTHANIZER FEED PREHEATER	650	1	Sprg 2003 TA	
				8	8	0
	#1 AMINE					
3004	AM.	60" ABSORBER-T0082	240	1	Sprg 2002 TA	
3007	AM.	VAPORIZER-E0835	275	1	Sprg 2002 TA	
3012	GLYCOL	GLYCOL CONTRACTOR-T0096	200	1	Sprg 2002 TA	
3021	AM.	36" ABSORBER K.O.-V0238	105	1	Sprg 2002 TA	
3022	AM.	36" ABSORBER TWR-T0101	125	1	Sprg 2002 TA	
3023	AM.	AM VAPOR. FUEL GAS K.O.-V0411	150	1	Sprg 2002 TA	
				6	6	0
	#2 AMINE					
3032	#2AM	AM. ABSORBER T0121	240	1		
				1	0	1
	TRANSPORT LOADING DOCK					
TR0177	TRANSPORT LOADING DOCK	TRUCK LOADING ARM		1		
TR0178	TRANSPORT LOADING DOCK	TRUCK LOADING ARM		1		
TR0182	TRANSPORT LOADING DOCK	TRUCK LOADING ARM		1		
TR0183	TRANSPORT LOADING DOCK	TRUCK LOADING ARM		1		
TR0187	TRANSPORT LOADING DOCK	TRUCK LOADING ARM		1		
TR0188	TRANSPORT LOADING DOCK	TRUCK LOADING ARM		1		
				6	0	6

Lower case denotes PSV location on equipment, not PRV description
2009 is also 2602 on the P&ID

Totals	96	34	62

Appendix 3

APPENDIX 3

The items identified in this Appendix 3 are the operating limitations that arose out of the 1994/1995 expansion project. Except as identified herein, there are no other operating limitations that arose out of the 1994/1995 expansion project.

A. General Conditions 1994/1995

1. Refinery Capacity: The No. 1 and No. 2 Crude Units are capable of processing 115,000 barrels of crude oil per stream day ("bpsd")[1] and 112,000 barrels of crude oil per calendar day ("bpcd")[2]. There may be other upstream and downstream limitations on the refinery's ability to operate at the Refinery Capacity.
2. FCCU Capacity: The fresh feed capability of the FCCU is 32,500 barrels per stream day, which corresponds to an annual fresh feed capability of 30,907 barrels per calendar day.

B. 1994 Construction Permit

3. The following units/components became subject to LDAR under the NSPS, Subpart VV/GGG, K.A.R. 28-19-150, standards as a result of the 1994 refinery expansion:
    (a) Merox Jet Fuel Sweetening Unit (FS-20-001) ((1994 Construction Permit – Air Emissions Unit Technical Specification Number 1, (hereinafter "1994 Spec. No. 1"))
    (b) #1 Crude Unit (FS-03-001) (1994 Spec. Nos. 2-6)
    (c) No. 1 Vacuum (FS-04-001) (1994 Spec. No. 11)
    (d) Hydrobon Unit (FS-09-001) (1994 Spec. Nos. 12, 14)

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[1] "stream day" means the maximum number of barrels of input that a facility can process within a 24-hour period when running at full capacity under optimal conditions with no allowance for downtime

[2] "calendar day" means the amount of input a facility can process under usual operating conditions. The amount is expressed in terms of capacity during a 24-hour period and reduces the maximum processing capacity of all units at the facility under continuous operation to account for limitations that may delay, interrupt or slow down production.

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(e) Platformer (FS-10-001) (1994 Spec. No. 15)

(f) FCCU (FS-13-001) (1994 Spec. Nos. 16-18)

(g) Coker Unit (FS-12-003) (1994 Spec. Nos. 19-22)

4. The following fugitive emission components were removed from service: (1) at the Petreco Bender Unit (Emission Unit not assigned) are 116 valves, 1 pump seal, 290 flanges (1994 Spec. No. 1); (2) at the #1 Crude Unit (FS-03-001) are 86 valves, 4 pumps, 236 flanges, and 6 heat exchangers (1994 Spec. No. 6); (3) at the #1 Vacuum Unit (FS-04-001) a number of flanges, a pump, valves, and heat exchangers (1994 Spec. No. 11); (4) at the Hydrobon Unit (FS-09-001) a number of valves, pumps, flanges, and relief valves (1994 Spec. No. 14); and (5) at the former overhead vapor line at the FCCU (FS-13-001) components were also removed from service (1994 Spec. No. 18).

C. 1995 Construction Permit

5. Tank 0552 (TK-0552), a 213,000 gallon aboveground crude oil storage tank was removed from service. (1995 Construction Permit – Air Emissions Unit Technical 1995 Spec No. 30 (hereinafter "1995 Spec. No. 30")).

6. Crude Tower Off-Gas Compressor: A compressor system recovers off-gas from the crude unit overhead receiver that previously had been vented to the atmosphere. The recovered off-gas is being compressed and will continue to be sent to the refinery fuel gas treating system. (1995 Spec No. 33)

7. Heaters DHR-1 and DHR-2: Two coker charge heaters (DHR-1 and DHR-2) at the Coker Unit have been dismantled. (1995 Permit Conditions (PC); General Requirements, ¶18)

8. The Hydrodesulfurization Unit wastewater stream (EU-08-100) is subject to NSPS, Subpart QQQ. (No 1995 Spec No.)

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9. The #2 Crude Unit (EU-06-100) is subject to NSPS, Subpart QQQ. (No 1995 Spec. No.)

10. New Bottom Loading Rack (EU-96-900, EU-96-901, FS-96-001): A gasoline and distillate loading rack replaced the former loading rack. The old loading rack was dismantled. The New Bottom Loading Rack is subject to the MACT Subpart CC standard. The vapor combustor is subject to NSPS, Subpart J. (1995 Spec. No. 5).

11. Sour Water Stripper (EU-28-001, EU-28-100, FS-28-001): A new sour water stripper was installed in 1996. Vent gas from the sour water stripper will continue to be routed to a Sulfur Recovery Unit for treatment prior to combustion in the tail gas treating unit. The Sour Water Stripper Wastewater Sump (EU-28-100) is subject to NSPS, Subpart QQQ. (1995 Spec. No. 40)

12. The #3 Vacuum Unit (FS-05-001) (not including the heater, which is included in the Consent Decree) is subject to NSPS LDAR, but monitoring is not required because the unit is in heavy liquid service and the overhead unit is in vacuum service. The #3 Vacuum Unit wastewater stream (EU-05-100) is subject to NSPS, Subpart QQQ. (1995 Spec. No. 3)

13. #1 Crude Unit heater (EU-03-FH0007): A 44 MMBTU/hr charge heater (the Struthers-Wells heater) is restricted to operating 400 hours per year. (1995 Spec. No. 32).

14. The following units/components are subject to LDAR under the NSPS standards as a result of the 1994/95 refinery expansion:

    (a) #2 Crude Unit (FS-06-001),(not including the heater, which is included in the Consent Decree) (1995 Spec. No. 3)

    (b) Sat Gas Unit (FS-22-001) (1995 Spec. No. 11)

    (c) Hydrodesulfurization Unit (FS-08-001) (1995 Spec. No. 15)

    (d) Hydrobon Unit (FS-09-001) (1995 Spec. No. 34)

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(e) New Bottom Loading Rack (No 1995 Spec. No.)

(f) Crude Tower Offgas Compressor (No 1995 Spec. No.)

15. H_2S Fugitives: Valves, pump seals, compressors seals, flanges, and pressure relief devices contribute fugitive emissions of hydrogen sulfide from the #1 Crude Unit (FS-03-001)(1995 Spec. No. 41); #2 Crude Unit (FS-06-001) (also subject to QQQ)(1995 Spec. No. 41); FCCU (FS-13-001)(1995 Spec. No. 41); Coker Unit (FS-12-001)(1995 Spec. No. 41), and Sour Water Stripper (FS-28-001)(also subject to QQQ)(1995 Spec. No. 41) are not subject to additional control requirements.

16. Tank 1017 (TK-1017): A 420,000 gallon spherical mixed NGL pressure vessel and associated piping, pump, and valve were constructed as part of the Alky Unit. This tank is not subject to NSPS, Subpart Kb pursuant to 40 C.F.R. § 60.110b(d)(2)(1995 Spec. Nos. 25 and 43).

D. New LDAR Standards

17. The following units/components were added as part of the 1994/1995 refinery expansion and have since become subject to LDAR under the MACT Standard:

(a) #1 Crude Unit (FS-03-001): Two new heat exchangers, six replacement heat exchangers, one water cooler, and four replacement pumps are the new components. There are no new air emission units. (1994 Spec. No. 2-6)

(b) FCCU Gas Concentration Unit (FS-13-001): A new, larger vapor line replaces the vapor line running from the fractionator overhead system to the Wet Gas Compressor. (1994 Spec. No. 16)

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(c) Coker Unit (FS-12-003): Two water pumps, four overhead fin fans, and new internal components for the absorber tower increase overhead condensing capacity at the Coker Unit, but did not increase emissions other than fugitive emissions. There are no new air emission point sources. (1994 Spec. No. 19-22)

(d) The No. 1 Vacuum Unit (FS-04-001) is subject to MACT LDAR, but monitoring is not required because the unit does not process HAPs and the overhead unit is in vacuum service. Two new heat exchangers and one replacement pump are the new components. There are no new air emission point sources (1994 Spec. No. 11)

(e) New Bottom Loading Rack: (1995 No LDAR Spec.)

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Appendix 4

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APPENDIX 4

Coffeyville Regulated Hazardous Waste Management Units

1. **Closed Surface Pond/Surge Impoundment (SWMUs 141, 142)** - The former Surface Pond was a RCRA regulated unlined surface impoundment which received process waste water before the wastewater was routed to the facility's API Separator. Following closure of the Surface Pond in 1990, a new surge impoundment was constructed at the same location. Respondent's Part A permit application and approved closure plan for the Surface Pond/Surge Impoundment state that during its operation this unit received characteristic (D001, D002 and D007) and listed (K048, K049 and K050) hazardous wastes. The results of samples taken from sludges in the former Surface Pond show concentrations above background levels for benzene, ethylbenzene, xylene, chrysene, phenanthrene and pyrene.

2. **The Former Oily Ponds (Hazardous Waste Landfill) (SMWU 93)** - The former Oily Ponds were three RCRA regulated unlined surface impoundments which consisted of the API Pond, the Mixed Pond and the Lime Pond. In 1990, the Oily Ponds were closed as a hazardous waste landfill. Respondent's Part A permit application and approved closure plan state that during their operation, the Oily Ponds received characteristic (D007) and listed (K048, K049, K050 and K05 1) hazardous wastes. The results of samples taken from sludges in the former Oily Ponds show concentrations above background levels for lead, chromium, xylene, chrysene, phenanthrene and pyrene. During the closure of the Oily Ponds as a Landfill, the Landfill received sludges from the Oily Ponds, asphalt and asphalt-contaminated soil, crude oilcontaminated soil from

around various crude oil storage tanks and bottom sludges.

3. **API ditch (SWMU 193)** - The former API ditch was a RCRA regulated unlined surface impoundment located in front of the former API Separator. The API ditch received process wastewater and hazardous wastes routed from the API Separator and Slop Oil Tank. Respondent's Part A permit application for the API ditch states the unit received characteristic (D002 and D007) and listed (K048, K049, K050, K051) hazardous wastes. This regulated unit has never undergone RCRA closure. During the facility "turnaround" in 1990, approximately 150 cubic yards of sludges were removed from the API ditch and disposed of in the Hazardous Waste Landfill. In 1991, the API ditch was filed in with dirt. Hydropunch data from samples taken in the area of the API ditch show concentrations above background levels for benzene, toluene, ethylbenzene and xylene.

4. **Heat Exchanger Bundle sludge (K050) cleaning areas (SWMUs 202, 203, 204)** - Throughout the facility, heat exchanger bundle sludge (K050) and wastewater contained in the heat exchangers have been washed directly onto the ground and/or into the facility drainage system. Three known areas were utilized for the cleaning of heat exchanger bundle sludge that were not directly connected to the facility drainage system. Areas located to the northeast of the "Sourwater stripper" unit, to the northwest of the "Hydrobon" unit and to the south of the "Crude" unit" are subject to closure and post-closure requirements as regulated hazardous waste management units based on the disposal of K050 heat exchanger bundle sludge.

5. **Cooling Tower areas (SWMUs 156 and 168)** - Six of the facility's fourteen cooling towers used chromium-based corrosion inhibitors through at least June

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1989. In its December 28, 1988 Part A application, Respondent identified wastes from the cooling towers using chromium-based inhibitors as a characteristic hazardous waste for chromium (D007). Blowdown and/or sludges from these cooling towers may have been released or placed into areas adjacent to the towers and/or washed into the facility drainage system. Areas adjacent to cooling towers Nos. 1 and 12 are subject to closure and post-closure requirements as regulated hazardous waste management units based on contamination by chromium tainted spray and/or blowdown.

6. **F037 Equalization Basin (SWMU 140)** - The former Equalization Basin was a surface impoundment that received inflow from the former API Separator. The Equalization basin operated until 1992. On May 2, 1991, the sludges contained in the Equalization Basin were listed as F037 and the Equalization Basin became regulated subject to RCRA regulation. F037 was listed as a hazardous waste for the presence of benzene, benzo(a)pyrene, chrysene, lead and chromium.

7. **F037 Surface ditches (SWMU 151)** - The facility operated a series of unlined surface ditches which fed into the facility's wastewater treatment plant. On May 2, 1991, the sludges which had accumulated in this system of ditches were listed as F037 hazardous waste and the ditches became subject to RCRA regulation. The results of samples taken from sludges in the F037 Surface Ditch show concentrations above background levels of benzene, ethylbenzene, xylene, chrysene, phenanthrene and pyrene.

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Phillipsburg Regulated Units:

1. **The Hazardous Waste Landfarm (SWMU 58)** - The Hazardous Waste Landfarm (Landfarm) was placed in operation in approximately 1974. The Landfarm is approximately 14 acres in size and is located in the northeast corner of the Facility. It received RCRA hazardous wastes from the Facility until 1990. The wastes disposed of in the Landfarm included, but were not limited to: DAY float (K048), slop oil emulsion solids (K049), heat exchanger bundle sludges (K050) and API Separator bottom sludges (K05 1). An estimated 600 tons of these wastes were annually disposed of in the Landfarm during its active life. The Landfarm underwent RCRA closure in 1990 - 1992, and is currently subject to post-closure groundwater monitoring. Soils impacted by petroleum hydrocarbons have been found in the uppermost three feet of soil at the Landfarm. The results of soil samples taken from the Landfarm in 1993 and 1994 show concentrations of lead and chromium in soils at the Landfarm. The results of groundwater monitoring samples taken from 1991 to 1994 detected chromium in the groundwater at levels in excess of MCLs in up gradient and down gradient wells.

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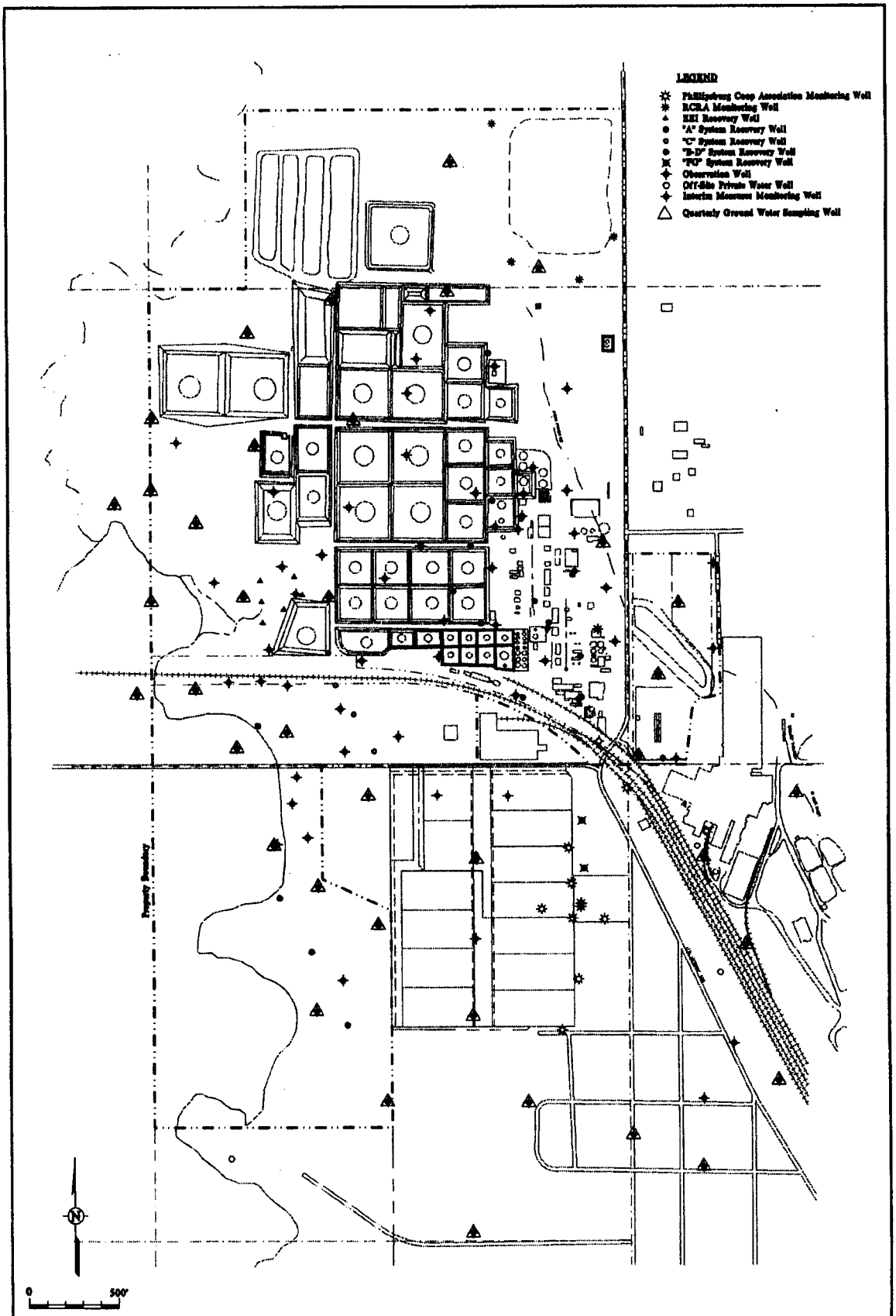
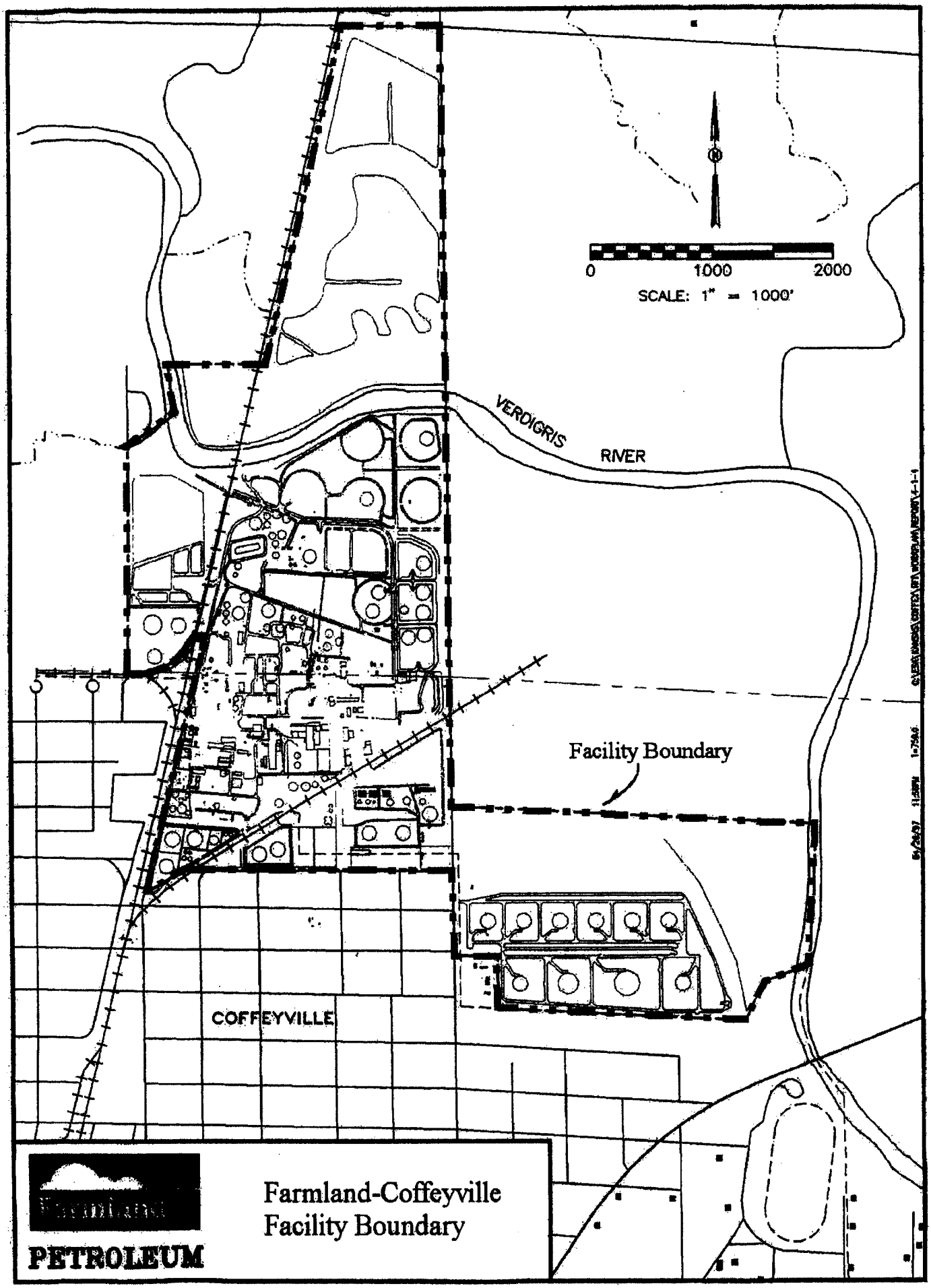
Appendix 5



ENVIRONMENTAL STRATEGIES CORPORATION
11911 FREEDOM DRIVE SUITE 900
RESTON, VIRGINIA 20190
(703) 709-6500

Figure 4-3
Farmland Industries, Inc.
Phillipsburg, Kansas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Memorandum

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90-11-2-07135/6

Subject:	*In re Solutia, Inc.* (Bankr. S.D.N.Y.), Liability of Solutia for Pre-Spinoff Releases/Migration of Hazardous Substances	**Date:**	March 8, 2004

To:	Alan Tenenbaum National Bankruptcy Coordinator Environmental Enforcement Section	**From:**	Kevin Lyskowski Trial Attorney Environmental Enforcement Section

This memorandum contains my preliminary answer to the question you asked me: is Solutia liable for the pre-spinoff release or migration of hazardous substances? As you know, Solutia was created in 1997 as a spin-off of Monsanto (now Pharmacia). Before turning to the question of Solutia's liability for pre-spinoff releases/migration, I think it is useful to begin with an exegesis of Solutia's Adversary Complaint, so that we clearly understand the framework through which Solutia views its potential liability. All paragraph references in this memorandum are to the Adversary Complaint.

Introduction

Solutia divides sites into three categories:

(1) Owned Sites ("real properties owned or operated by Solutia," ¶ 4);

(2) Surrounding Sites ("properties nearby, or contiguous to, the Owned Sites," *id.*); and

(3) Non-Owned Sites (properties which "Pharmacia owned or operated or to which Pharmacia sent hazardous substances for disposal," but which "Solutia never owned, operated, [or] used as waste disposal sites," ¶¶ 4, 65).

Note that Owned Sites are not necessarily co-extensive with Superfund sites. For example, the Anniston Superfund site consists of 15,300 acres, of which only 70 acres (the "Anniston Plant") are owned by Solutia. (¶¶ 30, 43) To Solutia, the Anniston Plant is an "Owned Site," and the rest of the Superfund site is a "Surrounding Site." (¶ 43) Similarly, the Krummrich Plant, property owned by Solutia near the Sauget Area 1 and Area 2 Superfund sites, is not actually part of either Superfund site. (*See, e.g.*, ¶ 52) To Solutia, the Krummrich Plant is an "Owned Site," and the actual Superfund sites are "Surrounding Sites." (¶¶ 50, 52)

Owned Sites

Solutia "does not contest its current obligations . . . to perform or pay for the remediation of various environmental conditions on its Owned Sites that pose a hazard to the public or the environment" (¶ 29), including contamination on Owned Sites which is now causing releases to off-site areas. (*See* ¶ 57, n.7)

In addition to the Anniston and Krummrich Plants, Owned Sites include Site R in Sauget Area 2 (¶ 55) and presumably also a portion of Dead Creek in Sauget Area 1. (¶ 53, n.6) The Adversary Complaint is silent on whether there are other Owned Sites.

Surrounding Sites

Solutia states that "[t]he vast majority, if not all . . . contamination on . . . Surrounding Sites occurred prior to Pharmacia's transfer of the[] Owned Sites to Solutia . . . and is not the result of migration of hazardous

substances during Solutia's ownership of the Owned Sites." (¶ 6) With respect to the Anniston and Sauget 1 Surrounding Sites, Solutia says that there is currently no release or migration of hazardous substances from Owned Sites at "actionable levels." (¶¶ 12, 49, 54) Solutia does not define what it means by "actionable levels," except with respect to Anniston, where it says PCB levels in water runoff from the Anniston Plant "are well below the actionable clean-up level being used to require clean-up of residential properties under the Anniston Consent Decree." (¶ 39)

Note that, for Anniston, Solutia concedes that the Owned Site (the Anniston Plant) is currently a source of contamination at the Surrounding Site, albeit at below "actionable levels." Solutia comes close to admitting the same for Sauget Area 1. To the extent there are any Owned Sites other than those at Anniston and Sauget, Solutia does not rule out the possibility that such Owned Sites are currently a source of contamination on Surrounding Sites. Solutia merely states that most, but not necessarily all, contamination on Surrounding Sites occurred before the spin-off.

Also, in the Adversary Complaint Solutia does not dispute that Sauget Area 2 may currently be subject to contamination from an Owned Site. Solutia mentions a September 2002 Administrative Order ("AO") which, according to Solutia, says that the Krummrich Plant "could be contributing" to groundwater contamination at Sauget Area 2. (¶ 63) Solutia does not take issue with the AO's finding.

Further, note that Solutia does not make any arguments in the Adversary Complaint about the CERCLA implications of the alleged absence of any current, significant release/migration of hazardous substances from Owned to Surrounding sites. Solutia does not say the alleged absence of such releases/ migration means that it is not liable under CERCLA to perform or pay for cleanup at the Surrounding Sites. Solutia merely states that, to the extent contaminants are not currently flowing from Owned to Surrounding sites at actionable levels, its obligation to perform or pay for cleanup at the Surrounding Sites is a "claim" under the Bankruptcy Code, and enforcement by EPA of such a claim is not exempted from the automatic stay by the police and regulatory exception or any other theory. (*See, e.g.,* "Prayer for Relief" of Adv. Compl.)

However, even if Solutia were to argue that it is not liable at the Surrounding Sites unless there is an ongoing release/migration from the Owned Sites at actionable levels, and even if we could not prove at a given site that there is any ongoing release/migration or ongoing threat of a release/migration, there is still a strong argument that Solutia is liable for cleanup at the Surrounding Sites. For example, in *United States v. Domenic Lombardi Realty, Inc.*, 204 F. Supp.2d 318 (D.R.I. 2002), the defendant argued that the "release" element of CERCLA was not satisfied because there were no ongoing releases; all of the releases took place before he purchased the property at issue. *See id.* at 330; *see also id.* at 321. "[D]efendant argues that in using the phrase 'from which there *is* a release,' the plain language of the statute makes clear that the release cannot have already occurred. Rather, according to defendant, it must be current and ongoing because the definition of 'release' is in the present tense." *Id.* at 330. The court declined to adopt the defendant's literal reading of the statute, concluding that to do so would frustrate CERCLA's goal of encouraging voluntary cleanup by private parties. *See id.* at 330-31. *Domenic Lombardi* and other cases which favor an expansive interpretation of CERCLA, *see, e.g., B.F. Goodrich Co. v. Murtha*, 958 F.2d 1192, 1198 (2d Cir. 1992) ("CERCLA must be construed liberally to effectuate its . . . goals . . . ."),[*/] support the conclusion that Solutia is liable at the Surrounding Sites, even if there have been no actual or threatened post-spinoff releases/ migrations from Owned Sites.

Further, there is the possibility that Solutia has conceded that it is directly liable to EPA at certain Surrounding Sites. For example, Solutia notes that it entered into the Anniston Consent Decree and an Administrative Order on Consent ("AOC") for Sauget Area 1, and that both the Consent Decree and the AOC require work at Surrounding Sites. (¶¶ 43, 59-60) Solutia states that it "entered into most consent decrees and administrative orders on consent only as Pharmacia's attorney-in-fact pursuant to [indemnity

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[*/] In , the Second Circuit overr

obligations under] the Distribution Agreement [which effected the spinoff]." (¶ 8, n.1) However, Solutia does not indicate whether it signed the Anniston Consent Decree or the Sauget AOC on its own behalf or simply as Pharmacia's attorney-in-fact. If the former, Solutia arguably conceded that it is directly liable to EPA under CERCLA at the Anniston and Sauget 1 Surrounding Sites, and not simply obligated to indemnify Pharmacia pursuant to the Distribution Agreement.

Non-Owned Sites

> With respect to Non-Owned Sites, Solutia states as follows:
>
> > Because Solutia was not an owner or operator nor did it arrange for disposal of hazardous substances at the Non-Owned Sites, Solutia has no direct liability under CERCLA at these sites. Solutia's only liability at the Non-Owned Sites is to Pharmacia, and it arises only as a result of Solutia's indemnity obligations under the Distribution Agreement.

(¶ 7) According to Solutia, there are "hundreds" of such Non-Owned Sites. (¶¶ 7, 65) It lists them in Exhibit A to the Adversary Complaint and highlights two (the Brio Site in Harris County, Texas, and the Chemsol Site in Piscataway Township, New Jersey) in the complaint itself. (¶¶ 73-88)

> The traditional common law doctrine of successor liability has been summarized as follows:
>
> > The general rule is that an asset purchaser . . . does not acquire the liabilities of the seller. There are, however, four exceptions to this general rule: (1) the purchaser expressly or impliedly agrees to assume the liabilities; (2) the transaction is a de facto merger or consolidation; (3) the purchaser is a "mere continuation" of the seller; or (4) the transaction is an effort to fraudulently escape liability.

N. Shore Gas Co. v. Salomon Inc., 152 F.3d 642, 651 (7th Cir. 1998). *Accord Aluminum Co. of Am. v. Beazer E., Inc.*, 124 F.3d 551, 565 (3d Cir. 1997); *B.F. Goodrich v. Betkoski*, 99 F.3d 505, 519 (2d Cir. 1996), *clarified on denial of reh'g*, 112 F.3d 88 (2d Cir. 1997); *United States v. Mex. Feed & Seed Co.*, 980 F.2d 478, 487 (8th Cir. 1992); *United States v. Carolina Transformer Co.*, 978 F.2d 832, 838 (4th Cir. 1992). Certain circuits have expressed a preference for determining successor liability under CERCLA by reference to state law rather than general principles of common law. *See Atchison, Topeka & Santa Fe Ry. Co. v. Brown & Bryant, Inc.*, 159 F.3d 358, 362-64 (9th Cir. 1998) (expressing doubt about propriety of applying federal common law); *City Mgmt. Corp. v. U.S. Chem. Corp.*, 43 F.3d 244, 251-53 (6th Cir. 1994) (applying Michigan law).